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# THE MIGRATION OF CANADIAN-BORN BETWEEN CANADA AND UNITED STATES OF AMERICA 1955 TO 1968

by

T. J. Samuel



RESEARCH BRANCH  
PROGRAM DEVELOPMENT SERVICE  
DEPARTMENT OF MANPOWER AND IMMIGRATION  
CANADA  
1969



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A publication of the  
Department of Manpower and Immigration  
Hon. Allan J. MacEachen, Minister

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Ottawa, 1970

Cat. No.: MP23-2768

## **FOREWORD**

This study forms part of a research program intended to shed more light on migration between Canada and the United States. It attempts to determine the extent and pattern of emigration of the Canadian-born to the United States and the volume of the return flow to Canada in the context of the 'brain drain'.

The analysis concentrates on Canadians who have migrated to and lived in the United States in the period 1955 to 1960. The data were obtained by special arrangement with the U.S. Bureau of the Census. Other statistical sources were the U.S. Department of Justice, the Dominion Bureau of Statistics, and the Department of Manpower and Immigration.

The study was prepared by T. John Samuel under the direction of Edgar Ziegler, Chief of the Immigration and Foreign Manpower Section.

It has benefitted from the comments of Professor Anthony Scott, Chairman, Department of Economics, University of British Columbia; Professor Anthony H. Richmond, Coordinator, Ethnic Research Program of York University; Mrs. Gail Graser of the Program Development Service, and Max von Zur-Muehlen of the Economic Council of Canada. Dietrich Dyck and Raoul Sylt of the Research Branch prepared the specifications for the tables.

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## CONTENTS

	Page
<b>FOREWORD</b>	i
<b>LIST OF TABLES</b>	iv
<b>LIST OF CHARTS</b>	v
<b>I INTRODUCTION</b>	1
<b>II LIMITATIONS OF THE DATA</b>	3
<b>III HISTORICAL TRENDS</b>	4
<b>IV RETURN MIGRATION</b>	4
<b>V CHARACTERISTICS OF EMIGRANTS</b>	5
(a) Age and Sex Distribution	6
(b) Earnings	6
(c) Education	11
(d) Occupation	17
1. Non-professionals	17
2. Professionals	23
(e) Sex Ratio	23
(f) Education	23
(g) Geographic Distribution	26
(h) Linguistic Composition	26
<b>VI PUSH AND PULL FACTORS</b>	29
(a) Economic Factors	30
1. Economic Opportunities	30
2. Level of Earnings	31
3. Employment Conditions	33
(b) Non-economic Factors	33
<b>VII CAUSES OF RETURN MIGRATION</b>	36
<b>VIII EMIGRATION IN 1960-68 AND PROJECTED RETURN MIGRATION</b>	38
(a) Emigration	38
(b) American Citizenship and Canadian-Born Emigrants	38
(c) Projected Return Migration	39
<b>IX BRAIN DRAIN</b>	41
<b>X SUMMARY OF FINDINGS</b>	42

## LIST OF CHARTS

Chart		Page
1	Canadian-Born Emigrants to U.S.A. and U.S. Immigrants giving Canada as the Region of Last Permanent Residence, 1955-1968.....	2
2A	Age Distribution of Canadian-Born in U.S.A. in 1960 as Compared to U.S. Population and Canadian Population (1961), by Sex .....	8
2B	Age Distribution of Canadian-Born in U.S.A. in 1960 as Compared to U.S. Population and Canadian Population (1961), by Sex (Male).....	9
2C	Age Distribution of Canadian-Born in U.S.A. in 1960 as Compared to U.S. Population and Canadian Population (1961), by Sex (Female).....	10
3	Ratio of Earnings of Canadian-Born Males Abroad in 1955 to Canadian-Born Males in Canada, by Age Groups, 1959 (U.S.A.) 1960-1961 (Canada).....	13
4	Canadian Population (1961), U.S. Population and Canadian-Born in U.S.A. (1960), 14 Years and Over, by Education and Sex .....	15-16
5	Occupational Distribution of Canadian-Born Emigrants to U.S., January 1955 to March 1960 as Compared to the Occupational Distribution of Canadian-Born Experienced Civilian Labour Force Abroad in 1955 and Enumerated in U.S. in 1960.....	22
6	Non-Professionals Among 'Canadian-Born Experienced Civilian Labour Force Abroad in 1955' and Enumerated in U.S.A. in 1960, by Education .....	25
7	Professional and Kindred Workers Among 'Canadian-Born Experienced Civilian Labour Force Abroad in 1955' and Enumerated in U.S.A. in 1960, by Education .....	28
8	Real Wages in Manufacturing in Canada and U.S.A., 1955-1967.....	32
9	Relationship Between Emigration and Unemployment, 1955-1967 .....	34
10	Estimated Percentage of Canadian-Born Emigrants to the U.S.A. Not Taking American Citizenship, 1953-1968 .....	40

## LIST OF TABLES

Table	Page
1 Canadian-Born Emigrants to U.S.A. and U.S. Immigrants Giving Canada as the Region of Former Residence, 1955-1968 .....	1
2 Estimates of Annual Emigration to, and Return Migration from, U.S.A. of Canadian-Born .....	5
3 Age Distribution of Canadian-Born to U.S.A. in 1960 as Compared to U.S. Population and Canadian Population (1961) by Sex .....	7
4 Median and Mean Earnings of Canadian-Born Males in U.S.A. as Compared to Canadian Males and U.S. White Males by Age Group, 1959 (U.S.A.) and 1960-1961 (Canada)....	12
5 Canadian Population (1961), U.S. Population and Canadian-Born in U.S.A. (1960), 14 Years and Over by Education and Sex .....	14
6 Occupational Distribution of Canadian-Born Experienced Civilian Labour Force Abroad in 1955 and Enumerated in U.S.A. in 1960 by Age Group .....	18-20
7 Occupational Distribution of Canadian-Born Emigrants to U.S.A. January 1955 to March 1960 .....	21
8 Non-Professionals Among 'Canadian-Born Experienced Civilian Labour Force Abroad in 1955' and Enumerated in U.S.A. in 1960 by Education .....	24
9 Professional and Kindred Workers Among 'Canadian-Born Experienced Civilian Labour Force Abroad in 1955' and Enumerated in U.S.A. in 1960 by Education .....	27
10 Distribution of Canadian-Born Population, Per Capita Income and Variance in Average Normal Temperature in Selected American States.....	29
11 Real Wages in Manufacturing in Canada and U.S.A., 1955-1967 .....	31
12 Estimated Percentage of Canadian-Born Emigrants Not Getting Naturalized in U.S.A., 1953-1968 .....	39



## I INTRODUCTION

Relatively unrestricted movement across the Canada-United States border has been a common phenomenon since the settlement of North America. Frequently, however, the volume of migration of Canadians to the U.S. has exceeded that of Americans to Canada. In view of the smaller population and comparatively slower rate of development of Canada, the emigration of Canadians to the U.S. has always been a matter of concern for the former; the net inflow of people to Canada from other parts of the world notwithstanding. This concern has found expression in scientific and popular literature and has been discussed repeatedly in the Canadian Parliament. While the question of emigration from Canada was always highlighted, very little was known about the return migration of some of these emigrants.

Emigrants from Canada to the U.S. include (1) Canadian-born persons who lived in Canada or elsewhere before migrating to the U.S. (2) persons who were immigrants to Canada and who became naturalized before migrating to the U.S., and (3) persons who immigrated to Canada, lived there for a while and then went to the U.S.

The trend of emigration to the U.S. since 1955 is shown in Table 1 and Chart 1. They also show the difference between those emigrants from Canada who give Canada as the place of last permanent residence and those who are Canadian-born and were living in the U.S.A. During the period 1955-65 the trend, in general, was towards an increase in emigration to the U.S. of Canadian-born. In 1966-67, however, there was a sharp decline followed by a small rise in 1968. During the period 1955-68 Canadian-born emigrants from Canada to the U.S. formed 70 per cent of total emigrants who gave Canada as the place of last permanent residence.

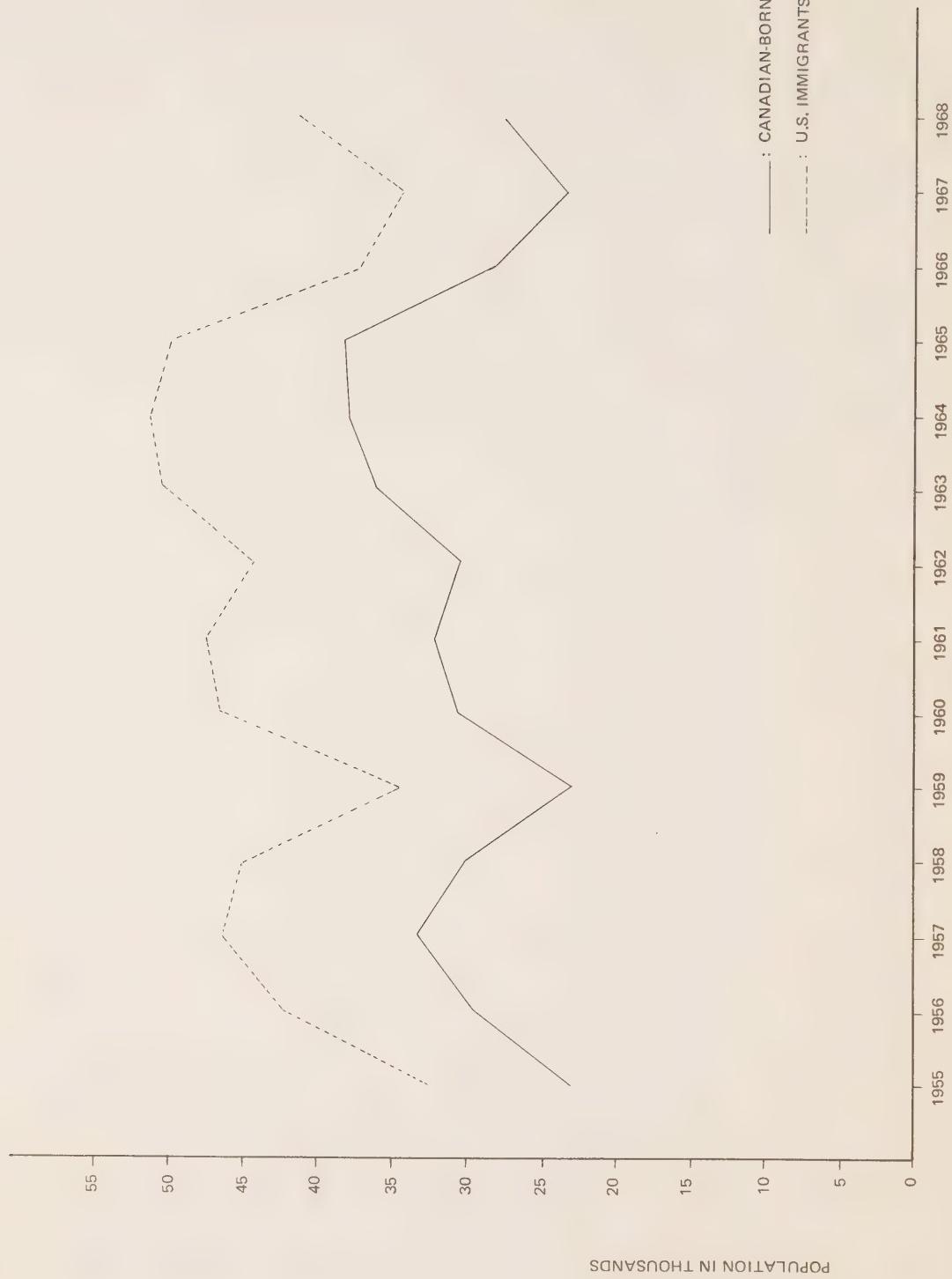
**Table 1 — Canadian-Born Emigrants to U.S.A. and U.S. Immigrants Giving Canada as the Region of Former Residence, 1955-1968**

	1 Canadian-Born Emigrants	2 U.S. Immigrants with Canada as Former Residence	3 Percentage of 1 Over 2
1955	23,091	32,435	71.2
1956	29,533	42,363	69.7
1957	33,203	46,354	71.6
1958	30,055	45,143	66.6
1959	23,082	34,599	66.7
1960	30,990	46,668	66.4
1961	32,038	47,470	67.5
1962	30,377	44,272	68.5
1963	36,003	50,509	71.3
1964	38,074	51,114	74.5
1965	38,327	50,035	76.6
1966	28,358	37,273	76.1
1967	23,442	34,768	67.4
1968	27,662	41,716	66.3
Total	424,235	604,719	70.1

Source: U.S. Department of Justice, Annual Reports of the Immigration and Naturalization Service, 1955-1968.

It is my intention in this paper to make a general examination of the emigration to, and return migration from, the U.S.A. of Canadian-born since 1955, with particular attention to the return migration of emigrants who left Canada between January 1955 and March 1960. Data have now become available, by special arrangement with the U.S. Bureau of the Census, on the number and characteristics of the Canadian-born who were in Canada in 1955, and who were counted on the U.S. census day of April 1, 1960. They moved to the U.S.A. either directly from Canada or from some other country between January 1955 and March 1960. These Canadian-born migrants who were in Canada in 1955, and counted in the 1960 U.S. census are referred to in this report as 'Canadian-born in U.S.A. abroad 1955'.

CHART I: CANADIAN-BORN EMIGRANTS TO U.S.A. & U.S. IMMIGRANTS GIVING CANADA  
AS THE REGION OF FORMER RESIDENCE, 1955-1968.



These data, when compared with information on the flow of Canadian-born to the U.S. during the same period, provide us with an estimate of the extent of return migration of Canadian-born from the U.S. Also, since the broad demographic and economic characteristics of 'Canadian-born in U.S.A. abroad 1955' are available, it is possible to have a clearer picture of the type of people Canada lost by emigration.

After a brief look at the limitations of the data and the historical trends in the emigration of Canadian-born to the U.S., the period 1955-60 is examined more closely. Attention is focussed on the emigration and return migration of 'Canadian-born in U.S.A. abroad 1955' and their principal characteristics. The push and pull<sup>1</sup> factors, both international and internal, which traditionally are believed to be causing migration, have received some attention. Emigration from Canada to the U.S. during the period 1960-68 is then briefly examined and the likely return migration for the period is estimated. How far emigration to the U.S. of the Canadian-born should be considered a serious problem in the context of the 'brain drain' is briefly discussed in the concluding part of the report.

## II LIMITATIONS OF THE DATA

It is well known that, on the one hand, census figures often suffer from the error of under-enumeration.<sup>2</sup> This is likely to have been higher for a more mobile population, in which category immigrants fall, than for the native-born. A similar bias is caused by the "the tendency for the Canadian-born to call themselves United States-born"<sup>3</sup> and by the likely non-inclusion in the census of Canadian-born students in the U.S. on landed immigrant visa.

On the other hand, it is possible that the figures may have been slightly inflated because of "the close similarity between Canadian birthplace and Canadian residence"<sup>4</sup> and therefore some of those with Canadian residence, but not born in Canada, may have reported their status as Canadian-born.

Another limitation of the data is that it was based on a 25 per cent sample, later blown up "through the use of a ratio estimation procedure".<sup>5</sup> We have been told that the net effect of the technique used is "a reduction in the sampling error and bias of net statistics below what could be obtained by weighting the results of the 25 per cent sample by a uniform ratio of four".<sup>6</sup> Though this method assures that the errors are not magnified four times, the possibility of a certain amount of error is, nevertheless, real. Furthermore, the data throw light only on the return migration of 'Canadian-born in U.S.A. abroad 1955' and counted in the U.S.A. in 1960, and no information is available on the period since then. In particular, it may be remembered, the problem of the emigration of Canadian-born professional and skilled manpower assumed increasing proportions in the early sixties. Since then total emigration to the U.S.A. has decreased.

In the absence of more refined and reliable data it would seem reasonable to accept the following advice on the estimates of net migration. "Until the information about errors in population statistics (particularly for sub-groups of the nation's population) is vastly expanded in scope and detail, the only alternatives seem to be (a) the observance of general caution in interpreting 'small' (undefined) estimates and differences or (b) uncritical acceptance of the estimates."<sup>7</sup>

We can, at best, get only a partial picture of the return migration of Canadians since there is no information available on the return migration of naturalized Canadian citizens. Perhaps even more useful would have been return migration on the basis of country of last permanent residence. In spite of these limitations, the information available is very useful in studying the population movements between Canada and the U.S.

<sup>1</sup> 'Push and Pull' are "defined respectively as the factors in the sending area that make continued residence there undesirable and the attractive forces, economic, social, etc., that emanate from the receiving area and which make residence there desirable". (William Robert Needham, *Immigration to Canada from the British Isles, 1951-64: A Regional Analysis of Sending Areas*, Ph.D. Thesis, Kingston, Ont., 1968, p. 8.)

<sup>2</sup> Akers, Donald S., "Estimating Net Census Undercount in 1960 using Analytical Techniques", Paper presented at the Meeting of the Population Association of America, May 1962, pp. 1-19.

<sup>3</sup> Keyfitz, Nathan, "The Growth of the Canadian Population", *Population Studies*, Part I, June 1960, p. 61.

<sup>4</sup> *ibid.*, p. 47.

<sup>5</sup> Bureau of the Census, United States Census of Population 1960, *Mobility and Parentage*, Washington, D.C., p. XIII.

<sup>6</sup> *ibid.*

<sup>7</sup> Stone, Leroy O., "Evaluating the Relation Accuracy and Significance of Net Migration Estimates", *Demography*, Vol. IV, No. 1, 1967, p. 312.

### III HISTORICAL TRENDS

The number of Canadian-born in the U.S. population during the period 1850-1960 reached its peak in 1910 at 1,196,070 from 147,711 in 1850.<sup>8</sup> Considered as a percentage of the U.S. population, the peak was reached in 1900 when 1.6 per cent of all U.S. population was Canadian-born.<sup>9</sup> The Canadian-born in the U.S. correspond to 25.3 per cent of the Canadian population in Canada in 1900. Since then their total number, as well as percentage, has declined. In 1960 the number of all Canadian-born counted in the U.S. census was 952,600, or 0.5 per cent of the total U.S. population; the lowest percentage on record. They were equivalent to 6.2 per cent of the native-born Canadians living in Canada in 1961 or 5.3 per cent of the total population of Canada.

In terms of gross flow, the emigration of Canadian-born to the U.S. has fluctuated considerably from time to time. The lowest on record was for the period 1890-94 at 611, and the highest for 1920-24 at 526,853.<sup>10</sup> Emigration of the Canadian-born to the U.S. declined since the 1920's to an average annual figure of 10,000 in the period 1935-44 and then rose to over 30,000 a year in 1950-54.<sup>11</sup>

The average annual rate of emigration of Canadian-born to the U.S. during 1955-60 was over 29,000 compared to 30,000 in the period 1950-54. It rose to 33,500 during 1960-64. During the 1965-68 period the annual rate of emigration of Canadian-born to the U.S. declined to 29,000.

### IV RETURN MIGRATION

Figures of gross emigration of Canadian-born to the U.S.A. do not always tell the whole story about migration. Some of these emigrants return to Canada at a later date and this information would enable us to arrive at the figures of net migration.

According to Ravenstein's "Law of Migration" each main current of migration produces a compensating counter current.<sup>12</sup> In modern terminology it means "for every major migration stream, a counterstream develops".<sup>13</sup> It has been estimated that 30 per cent of immigrants to the U.S.A. between 1821 and 1924 returned home.<sup>14</sup> Return migration from Argentina in 1951 amounted to 24 per cent for Italian nationals, 13 per cent for Spanish, 30 per cent for Germans, 43 per cent for Polish and 16 per cent for Yugoslavs.<sup>15</sup> The return migration of British immigrants from Australia during the period 1955-60 is estimated to be 14.8 per cent<sup>16</sup> and during the period 1959-64, 16 per cent.<sup>17</sup> During the period 1956-65, 19 per cent of immigrants in the labour force who came to Canada from Britain were estimated to have returned there. When this information on British immigrants was broken-down into five-year periods, 1956-60 and 1961-65, it was found that while the mean annual rate of return for the former period was 12.5 per cent, for the latter it was 31.5 per cent.<sup>18</sup>

In the past, attempts have been made to estimate the extent of return migration of Canadian-born from the U.S.A. The estimates were based on two successive censuses of Canada or the U.S.A. No two students of Canadian population have agreed, however, on a set of figures that could reliably be used as an estimate of the net migration of Canadian-born to, or of return migration from, the U.S.A. According to an estimate by Pierre Camu and others, during the period 1941-51, 100,000 Canadian-born are estimated to have returned to Canada from the U.S.<sup>19</sup> The estimate for the period 1951-61 is 230,000,<sup>20</sup> an annual average rate of 23,000. Since recorded average gross

<sup>8</sup> Truesdell, Leon E., *The Canadian-Born in the United States*, p. 10, and DBS, *The Canadian-Born in the United States*, Reference Paper No. 71, p. 4.

<sup>9</sup> *ibid.*

<sup>10</sup> Bogue, Donald J., *The Population of the United States*, The Free Press of Glencoe, Ill., 1959, p. 352.

<sup>11</sup> *ibid.*

<sup>12</sup> Ravenstein, E. G., "The Laws of Migration", *Journal of the Royal Statistical Society*, XLVIII, Part 2, June 1885 as in Everett S. Lee, "A Theory of Migration", *Demography*, III (1), 1966, p. 55.

<sup>13</sup> Lee, Everett S., *loc. cit.*

<sup>14</sup> Isaac, Julius, *Economics of Migration*, K. Paul, Trench, Trubner & Co., London, 1947, p. 63.

<sup>15</sup> Isaac, Julius and Van den Beld, C.A., *The Effect of Migration on the Economy of Sending and Receiving Countries*, The Hague, Mimeo, 1953, p. 153.

<sup>16</sup> Appleyard, R. T., "The Return Movement of United Kingdom Migrants from Australia", *Population Studies*, XV, March 1962, p. 220.

<sup>17</sup> *The Economist*, "Why They Leave Britain", London, August 31, 1968, p. 43.

<sup>18</sup> Richmond, Anthony H., "Return Migration from Canada to Britain", *Population Studies*, Vol. XXII, No. 2, July 1968, p. 264.

<sup>19</sup> Camu, Pierre; Weeks, E. P. and Sametz, Z. W., *Economic Geography of Canada*, MacMillan, 1964, p. 60.

<sup>20</sup> *ibid.*

emigration to the U.S.A. during this period has been about 28,000 a year, the net migration of Canadian-born to the U.S. works out to be around 5,000 a year.

On the basis of U.S. census figures, Louis Parai arrives at an estimate of about 120,000 as the net migration of Canadian-born to U.S.A. during 1950-60.<sup>21</sup> This gives an annual average net migration of 12,000; more than double the rate arrived at by Camu and others. The data that we have on return migration from the U.S.A., though relating to only half the period mentioned above, provide no basis on which any of the above estimates could be supported. During the period January 1, 1955 to April 1, 1960, a total of 150,662 Canadian-born who were in Canada in 1955 emigrated to the U.S.A. On U.S. census day of April 1, 1960, however, 94,527 of them were counted. After allowing for a certain number of deaths,<sup>22</sup> the number of Canadian-born expected to be counted was 146,727. Since the number expected did not appear in the actual count, it might be assumed that those 'missing' had returned to Canada or migrated to another country. If the number of Canadian-born migrating from the U.S.A. to another country is assumed to be insignificant, those found 'missing' in the U.S. might have returned to Canada.<sup>23</sup> We arrive at a figure of 52,200 as the number of 'Canadian-born in U.S.A. abroad in 1955' returning to Canada. The rate of return migration works out to be 35.6 per cent of those expected to be counted (i.e., after allowing for a certain number of deaths) in the U.S.A. or 34.6 per cent of Canadian-born emigrants to the U.S.A. during this period.

The annual rate of net migration to the U.S.A. of Canadian-born during this period works out to be around 19,000 as compared to an average annual emigration of 29,000; giving an annual return migration of 10,000. The factors influencing return migration will be discussed later. Table 2 below compares various estimates currently available on the emigration and return migration of Canadian-born to the U.S.A.

**Table 2 — Estimates of Annual Emigration to, and Return Migration from, U.S.A. of Canadian-Born**

	Camu, Weeks and Sametz (1951-61)	Parai (1950-60)	Samuel (1955-60)
Gross emigration	28,000	28,000	29,000
Returnees	23,000	16,000	10,000
Net emigration	5,000	12,000	19,000
Per cent net	18	43	65

During the period January 1955 to April 1, 1960, the total number of professional, technical and kindred workers who are reported to have emigrated to the U.S. was 17,929. Only 9,161 of them were counted on the U.S. census day of April 1, 1960. This shows a 'gross disappearance rate'<sup>24</sup> of 48.9 per cent for the professionals as compared to 40.7 per cent for the 'Canadian-born labour force in U.S.A. abroad 1955'.

## V CHARACTERISTICS OF EMIGRANTS

Some of the principal characteristics of Canadian-born emigrants to the U.S. could be compared to similar characteristics of the Canadian and U.S. populations at large in order to see the implications of these population movements. The age, sex and linguistic composition, level of education, occupational, income and geographic distribution of Canadian-born emigrants are available. When occupational distribution is discussed, the professionals are singled out for separate treatment since they form the topic of the much-discussed 'brain-drain'.

<sup>21</sup> Parai, Louis, *Immigration and Emigration of Professional and Skilled Manpower during the Post-War Period*, Queen's Printer, 1966, p. 130.

<sup>22</sup> In order to arrive at the probable number of deaths, U.S. life tables for 1958 for whites were applied to the Canadian-born in U.S.A.

<sup>23</sup> It should be mentioned in this context that some international migrants spend periods in a number of countries before returning to their country of origin. However, very little information of this nature is available on the Canadian-born in U.S.A.

<sup>24</sup> "Gross disappearance rate" here refers to the percentage of immigrants who had disappeared from that occupation during the specified period due to factors such as return migration, migration to another country, death, retirement, and the net difference caused by those who entered, or left, the profession.

### (a) Age and Sex Distribution

'Canadian-born in U.S.A. abroad 1955' consisted mostly of persons in the 15-64 age group; 74.0 per cent as seen in Table 3 and Chart 2A. This compares with 58.0 per cent in the corresponding age group in Canada in 1961 and 60.0 per cent in the U.S. in 1960 as seen in Charts 2B and 2C. Since the age group 5-39 usually forms 75 per cent of total immigrants, it could be considered as the reservoir from which migrants would usually be drawn. This age group formed 57 per cent of total Canadian population in 1961 as compared to U.S.A.'s 53 per cent in the previous year. This higher percentage in the 5-39 age group for Canada is also a reflection of comparatively larger immigration to Canada. That does not affect the inference, however, that Canada had a higher percentage of population at 'risk' of emigrating.

Historically, Canadian-born population in the U.S. has had an "appreciable excess of females".<sup>25</sup> Females in the Canadian-born white population in the U.S. increased their percentage from 48.3 in 1900 to 57.0 in 1960.<sup>26</sup> According to data on the emigration of Canadian-born to the U.S. during 1955-59, for every 100 females who emigrated, only 81 males did so.

In the age group 10-29, 57.6 per cent of emigrants were females, and one in every three Canadian-born female emigrants to the U.S. belonged to the 20-29 age group. Most of the women found in this age group were in nursing or school teaching and because they were single they had a high mobility rate. It is also probable that some of them anticipated better marriage prospects in the U.S.; a view which is supported by some indirect evidence. While the ratio of males to females was 81:100 among Canadian-born emigrants to the U.S. during the period 1955-60, at the 1960 U.S. census it was 75:100. Also the net rate of return migration for females was 34.5 per cent of emigrants during the period as compared to 36.9 per cent for males. These differences in sex ratio and return migration, indicating that a higher proportion of women remained in the U.S., might be the result of many unmarried females finding marriage partners.

### (b) Earnings

This is one of the characteristics that demands attention by virtue of its importance in causing, as well as being the result of, migration. Mean and median earnings of 'Canadian-born males in U.S.A. abroad 1955' for the year 1959 are available according to age and level of education. These figures for earnings are then compared (Table 4) with those for the male population in Canada and the white male population in the U.S.A.<sup>27</sup>

There are some minor difficulties in comparing earnings data for Canada and the U.S.A. Canadian data, unlike those of the U.S., do not include earnings from agricultural occupations. Among the 'Canadian-born in U.S.A. abroad 1955' however, only 1.4 per cent were in agricultural occupations. The difference caused by omitting earnings from agricultural occupations in Canada could introduce an upward bias in the figures for Canadian earnings, since in agricultural occupations in general they have invariably been lower than those in non-agricultural occupations. Similarly a downward bias in the earnings of 'Canadian-born abroad in 1955' could be expected, since those who were not in the U.S. for the full year of 1959 and for whom the earnings are reported, are likely to have had a lower level.

We have two measures of central tendency regarding earnings available to us, namely, median and mean. The mean and the median figures of earnings for Canadian-born in U.S.A. do not coincide, however, indicating that the distribution was skewed and the figures showing mean earnings were affected by extreme values.

Mean and median earnings of 'Canadian-born males in U.S.A. abroad 1955' for the year 1959 may be compared to the mean and median earnings of white males in the U.S.A. and to the mean earnings of males in Canada in 1961. For the 25-64 age group, the mean as well as median earnings of 'Canadian emigrant males in U.S.A. abroad 1955', were lower than the earnings of white U.S. males. The annual median earnings were less by \$123 and the mean earnings by \$458. If the earnings of all Canadian-born males in the U.S.A., disregarding the period of arrival, are compared

<sup>25</sup> Truesdell, Leon E., *loc. cit.*, p. 5.

<sup>26</sup> Calculated from U.S. Department of Commerce, Bureau of the Census, United States Census of Population 1960, *Nativity and Parentage*, PC(2) 1 A., Washington, D.C., p. 31

<sup>27</sup> The white population in the U.S.A. was selected for comparison for two reasons. First the Canadian-born who emigrate to U.S.A. are mostly white, and second, the level of earnings of all U.S. population is unduly depressed by the lower level of earnings of the Negroes. Attention is focussed on the male population on the assumption that differences in their levels of earnings would illustrate the extent and pattern of the differences for the whole population.

Table 3 — Age Distribution of Canadian-Born in U.S.A. in 1960 as Compared to U.S. Population and Canadian Population (1961) by Sex

Sex and Age	Total U.S. Population		Canadian-Born in U.S.A.		Canadian-Born in U.S.A. Abroad, 1955		Total Canadian Population	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Total	179,325,671	100.0	953,806	100.0	94,527	100.0	18,238,247	100.0
0-14	55,796,979	31.1	65,776	6.9	23,093	24.4	6,191,922	34.0
15-64	107,321,455	59.9	667,691	70.0	69,954	74.0	10,655,171	58.4
65 and over	16,207,237	9.0	220,339	23.1	1,480	1.6	1,391,154	7.6
Male Total	88,303,113	100.0	410,167	100.0	41,254	100.0	9,218,893	100.0
0-14	28,390,539	32.1	33,266	8.1	11,520	27.9	3,166,091	34.3
15-64	52,603,608	59.6	288,084	70.2	29,198	70.8	5,378,685	58.4
65 and over	7,308,966	8.3	88,817	21.7	536	1.3	674,117	7.3
Female Total	91,022,558	100.0	543,639	100.0	53,273	100.0	9,019,354	100.0
0-14	27,406,440	30.1	32,510	6.0	11,573	21.7	3,025,831	33.6
15-64	54,717,847	60.1	379,607	69.8	40,756	76.5	5,276,486	58.5
65 and over	8,898,271	9.8	131,522	24.2	944	1.8	717,037	7.9

Sources: (1) U.S. Department of Commerce, Bureau of the Census; Special Tabulations; United States Census of Population, 1960, *United States Summary, General Characteristics*, p. 146.

(2) DBS, 1961 Census, *Population Age: Groups*, p. 1, Table 2-1.

CHART 2A: AGE DISTRIBUTION OF CANADIAN-BORN IN U.S.A. IN 1960, AS COMPARED  
TO U.S. POPULATION AND CANADIAN POPULATION (1961), BY SEX.

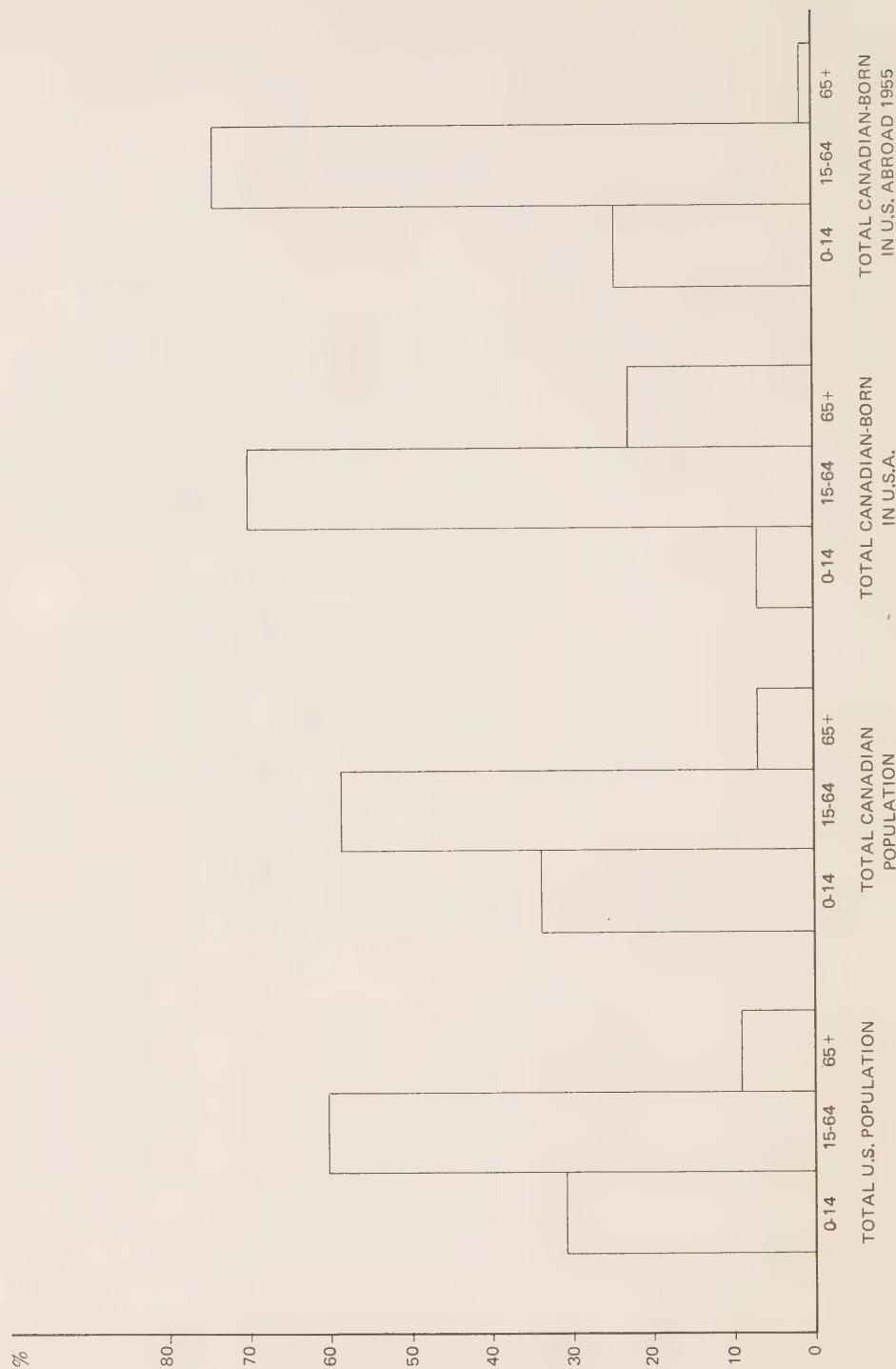


CHART 2B: AGE DISTRIBUTION OF CANADIAN-BORN IN U.S.A. IN 1960, AS COMPARED  
TO U.S. POPULATION AND CANADIAN POPULATION (1961), BY SEX (MALE)

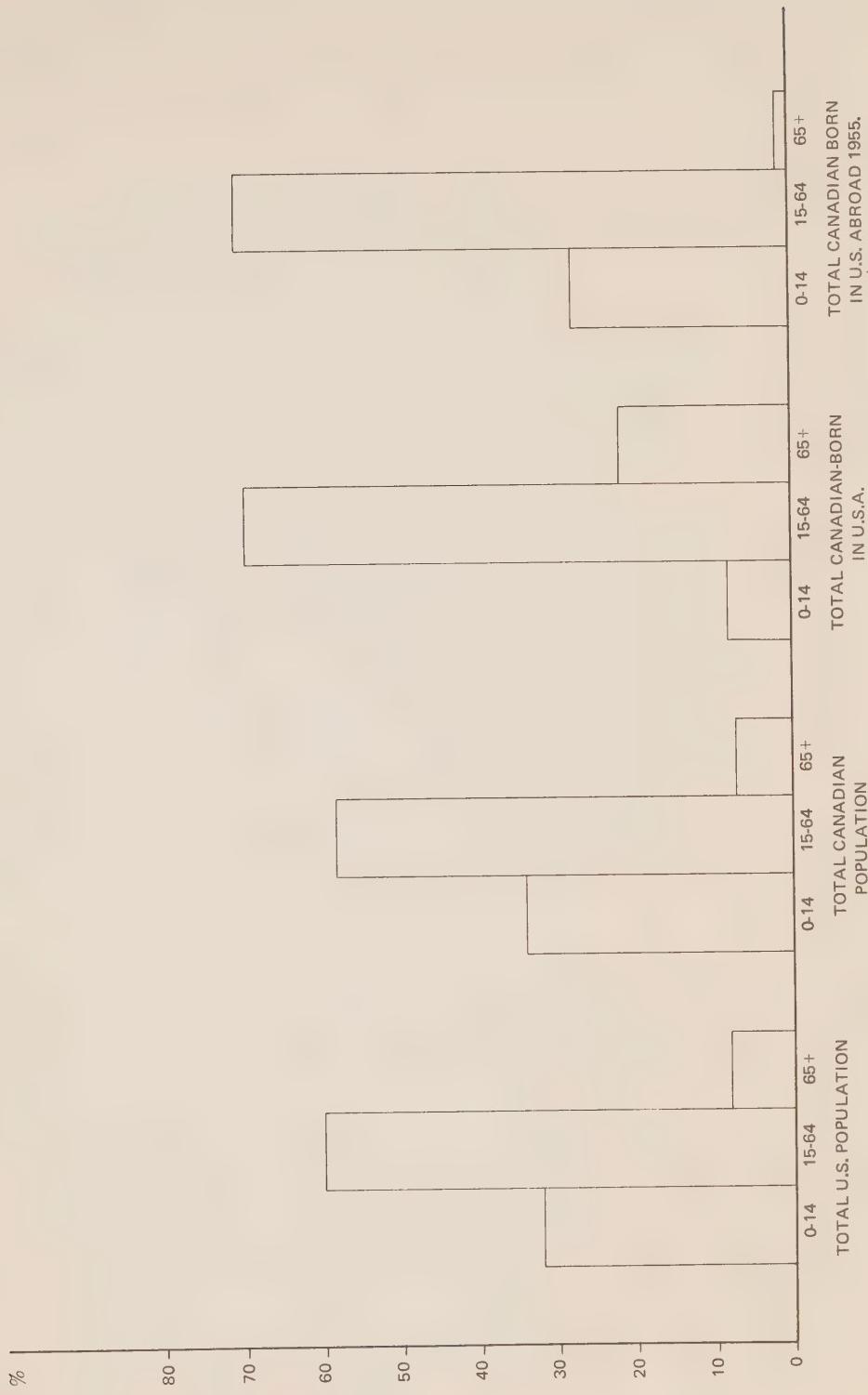
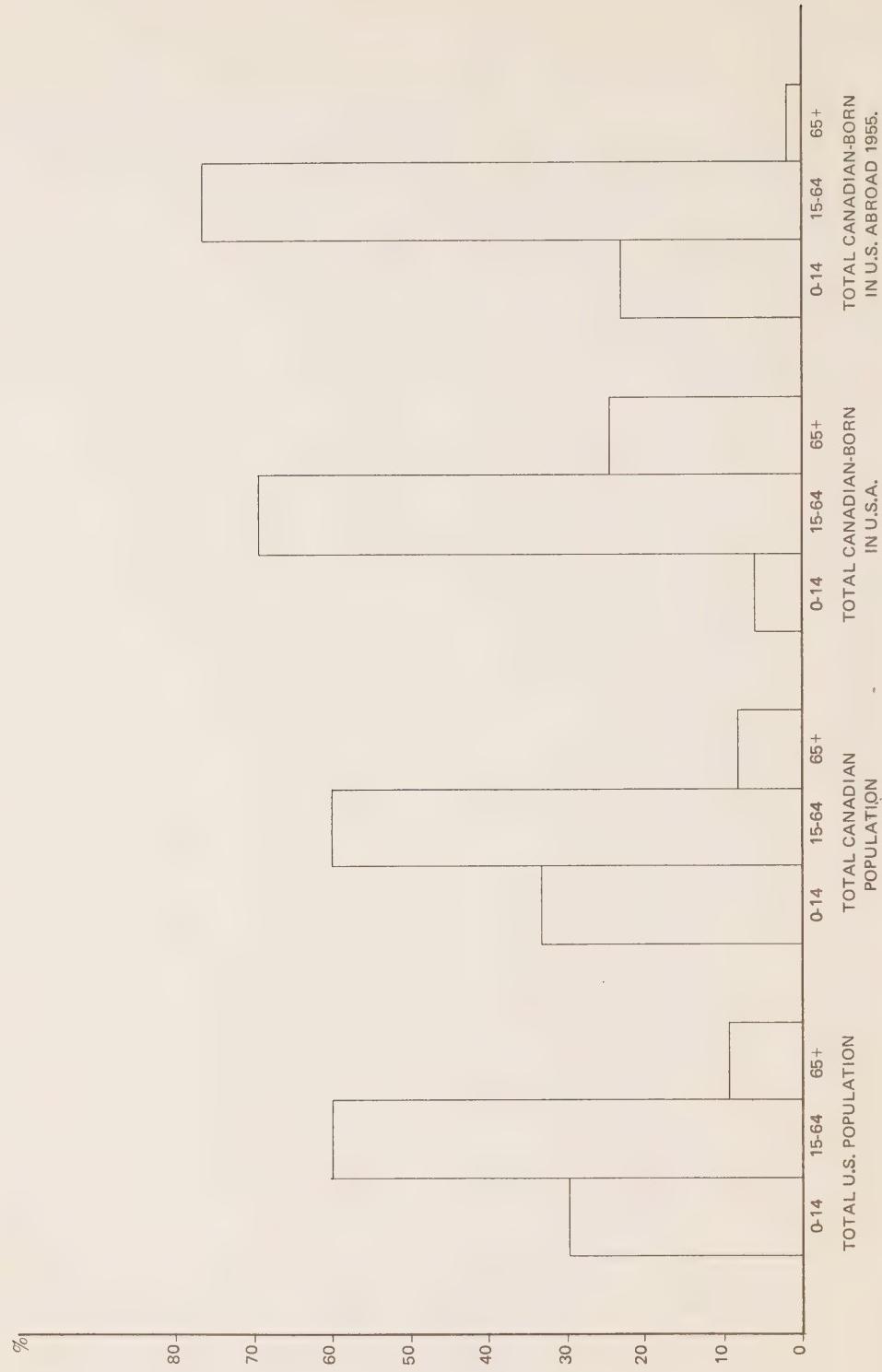


CHART 2C: AGE DISTRIBUTION OF CANADIAN-BORN IN U.S.A. IN 1960, AS COMPARED  
TO U.S. POPULATION AND CANADIAN POPULATION (1961), BY SEX (FEMALE)



to the earnings of white U.S. males, however, it is found that the Canadian-born had higher median earnings, but for most age groups lower mean earnings as seen in Table 4 and Chart 3. When the median is more than the mean, the distribution of earnings is skewed to the left which indicates that there was a high percentage of Canadians whose earnings were comparatively very low. A 'Canadian-born male in U.S.A. abroad 1955' earned on the average 16 per cent less than a white U.S. male. In terms of the median, he earned only 2 per cent less.

Except for the age group 35-44, for which also the 'Canadian-born males abroad 1955' had lower mean earnings but higher median earnings, the mean and median earnings of all other age groups were lower for 'Canadian-born males abroad 1955' than for U.S. white males. This was probably due to the fact that these immigrants had been in the U.S. for less than three years on the average and had not had an opportunity to establish themselves. In all the age groups, however, the total Canadian-born male population in the U.S.A. had higher *median* earnings than white U.S. males.

Less educated 'Canadian-born in U.S.A. abroad 1955' do comparatively better than those with university education. For example, when earnings ratios (earnings of Canada males in the U.S.A. divided by earnings of Canadian males in Canada) of Canadian-born males in Canada and Canadian-born males in U.S.A. are compared, those with a university degree (or four years of college) were found to be in the range of 0.53 to 0.89 for the decennial age groups within the broad age group 25-64. This compares with earnings ratios of 1.00 to 1.17 for those with an elementary education (seven years or less of schooling).<sup>28</sup>

Nevertheless, Canadians emigrating to the U.S.A. did improve their earnings. The extent of the improvement varied from age group to age group. Assuming data on earnings from the 1960 U.S. census and the 1961 Canadian census are comparable, and furthermore that the difference in the exchange rate between the currencies of the two countries could be ignored,<sup>29</sup> the Canadian-born males abroad in 1955 in the 25-34 age group had an increase in median earnings of 14 per cent, in the 35-44 age group 24 per cent, and in the 45-54 age group 11 per cent. The 55-64 age group experienced a decline in median earnings. As noted before, however, those 'Canadian-born abroad 1955' were in the U.S.A. for an average of less than three years. If the median earnings of all Canadian-born in U.S.A. are used for comparison we find that the 25-34 age group can expect eventually to improve their median earnings by 32 per cent, the 35-44 age group by 58 per cent, 45-54 age group by 56 per cent and the 55-64 age group by 53 per cent as compared to their expected earnings in Canada.

To sum up, though Canadian-born in the U.S.A. definitely improved their earnings while in the U.S.A., compared with their earnings in Canada, they did not rise above the average for U.S. whites.

### (c) Education

'Canadian-born population in U.S.A. abroad 1955' was a highly educated group as seen in Table 5 and Chart 4. 12.6 per cent of them had a university degree, as compared to 6.5 per cent of the U.S. population in 1960 and 3.0 per cent of the Canadian population in 1961. 14.8 per cent of them had some college as compared to 8.9 per cent of U.S. population, and 3.1 per cent of the Canadian population.

It appears that the percentage of the better educated among Canadian-born emigrants in the period 1955-60 was higher than that for the previous period (1950-1954). Only 20.3 per cent of the *total* Canadian-born population in the U.S.A. in 1960 had attended college or had a university degree, compared to 27.4 per cent of the 'Canadian-born abroad 1955'. The increase was from 20.9 per cent to 28.9 per cent for males and from 19.3 per cent to 25.4 per cent for females — the percentages being higher for males than for females. This is not surprising in view of the higher proportion of professionals among the 'Canadian-born in U.S.A. abroad 1955'. 68.3 per cent of those in 'professional, technical and kindred' occupations among Canadian emigrants had a college education and 36.2 per cent of non-professionals had four years of high school or more.

It is surprising, that in spite of their higher education, earnings of Canadians were lower than those of American citizens.

<sup>28</sup> Computed from DBS, 1961 Census, *General Review, Earnings and Income Distribution*, pp. 13-14 and special tabulations from U.S. Bureau of the Census.

<sup>29</sup> This difference is ignored as was done by the Economic Council of Canada, since differences in price levels between Canada and U.S.A. are expected to correct differences in real income from this source. (See Economic Council of Canada, *Second Annual Review*, December 1965, p. 54.)

**Table 4 — Median and Mean Earnings of Canadian-Born Males in U.S.A. as Compared to Canadian Males and U.S. White Males by Age Group, 1959 (U.S.A.) and 1960-1961 (Canada)**

Age Group	White U.S. Males				All Canadian-Born Male Population in U.S.A.				Canadian-Born Males in U.S.A. Abroad 1955				Canadian-Born Males in Canada				Ratio of Earnings of Canadian-Born Males Abroad in 1955 to Canadian-Born Males in Canada			
	Median		Mean		Median		Mean		Median		Mean		Median		Mean		Median		Mean	
	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean
25-34	5,102	5,412	5,728	5,470	4,937	5,119	4,333	4,396	1,14	1,16	1,32	1,24	1,16	1,16	1,16	1,16	1,16	1,16	1,16	1,16
35-44	5,657	6,540	7,364	6,254	5,743	6,397	4,648	4,926	1,24	1,24	1,30	1,35	1,24	1,24	1,24	1,24	1,24	1,24	1,24	1,24
45-54	5,317	6,487	7,018	5,742	4,992	5,959	4,512	4,891	1,11	1,11	1,22	1,27	1,11	1,11	1,11	1,11	1,11	1,11	1,11	1,11
55-64	4,802	5,992	6,349	5,181	3,787	4,953	4,140	4,542	0,91	0,91	1,09	1,25	0,91	0,91	0,91	0,91	0,91	0,91	0,91	0,91

Sources: (1) U.S. Department of Commerce, Bureau of the Census; Special Tabulations; *Occupation by Earnings and Education*, PC (2) 7B, p. 2.

(2) DBS, 1961 Census, *General Review*, Queen's Printer, Ottawa, pp. 11-14.

CHART 3: RATIO OF EARNINGS OF CANADIAN-BORN MALES ABROAD IN 1955  
TO CANADIAN-BORN MALES IN CANADA BY AGE GROUPS  
1959 (U.S.A.) 1960-1961 (CANADA)

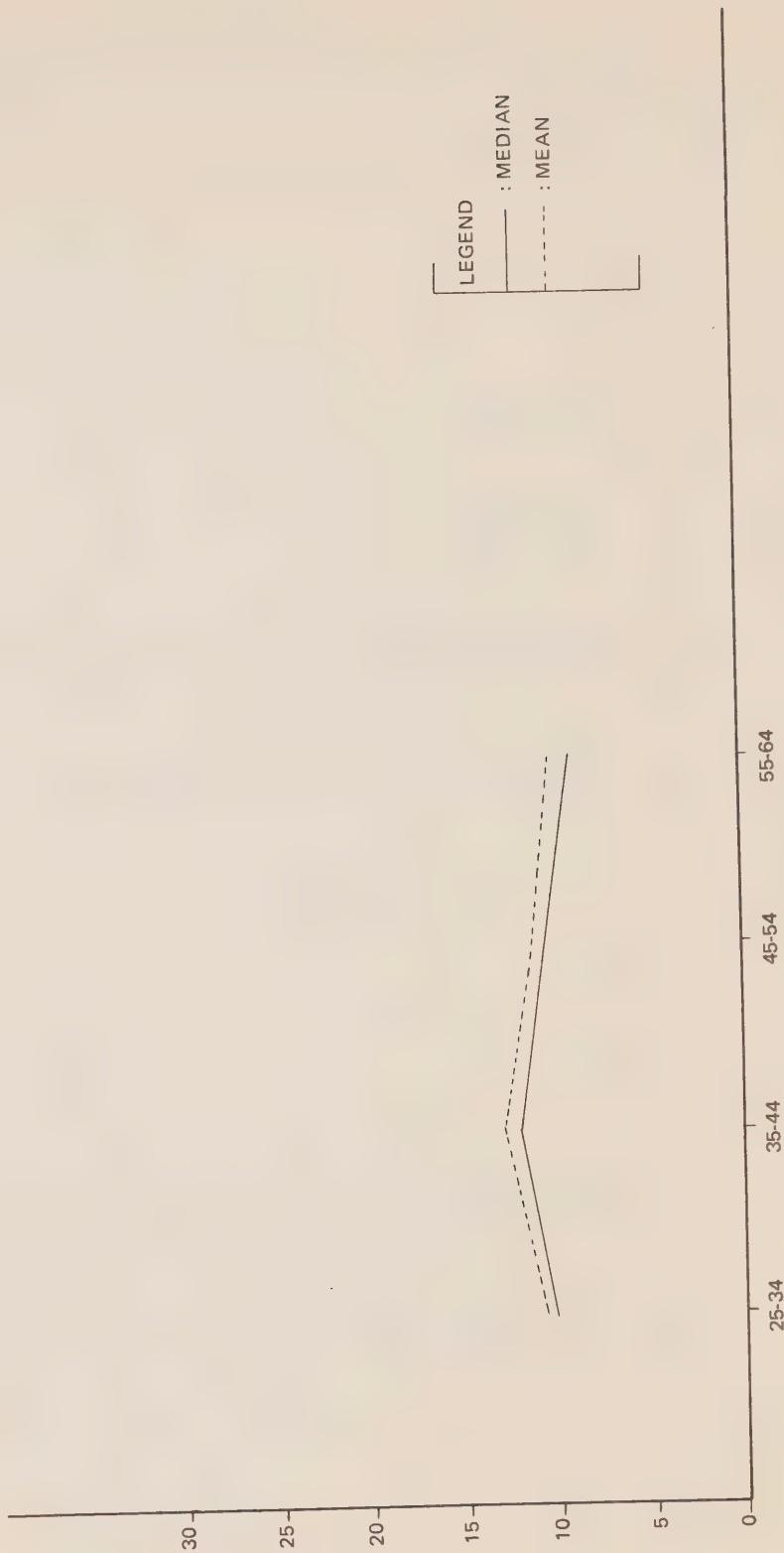


Table 5 — Canadian Population (1961), U.S. Population and Canadian-Born in U.S.A. (1960), 14 Years and Over by Education and Sex

	Canadian Population in Canada						U.S. Population in U.S.A.					
	Males			Females			Total			Males		
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Total	5,498,252	100.00	5,548,353	100.00	11,046,605	100.00	61,315,362	100.00	64,961,189	100.00	126,276,551	100.00
1. Elementary Education or less	2,744,300	49.91	2,422,046	43.65	5,166,346	46.77	23,826,674	38.86	22,536,668	34.69	46,363,342	36.72
2. Secondary Education	2,340,054	42.56	2,869,369	51.72	5,209,423	47.16	27,107,367	44.21	33,382,266	51.39	60,489,633	47.90
3. Some College	182,179	3.32	161,754	2.92	343,933	3.11	5,402,580	8.81	5,784,660	8.91	11,187,240	8.86
4. University Degree	231,719	4.21	95,184	1.71	326,903	2.96	4,978,741	8.12	3,257,595	5.01	8,236,336	6.52

	Canadian-Born Population in U.S.A.						“Canadian-Born Population Abroad 1955”, in U.S.A.					
	Males			Females			Males			Females		
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Total	282,796	100.00	174,085	100.00	456,881	100.00	24,066	100.00	17,224	100.00	41,290	100.00
1. Elementary Education or Less	106,823	37.77	50,021	28.73	156,844	34.33	6,360	26.43	2,788	16.19	9,148	22.16
2. Secondary Education	116,961	41.36	90,391	51.93	207,352	45.38	10,770	44.75	10,065	58.43	20,835	50.46
3. Some College	28,246	9.99	22,736	13.06	50,982	11.16	2,890	12.01	3,226	18.73	6,116	14.81
4. University Degree	30,766	10.88	10,937	6.28	41,703	9.13	4,046	16.81	1,145	6.65	5,191	12.57

Source: U.S. Department of Commerce, Bureau of the Census, Special Tabulations.

CHART 4: CANADIAN POPULATION (1961), U.S. POPULATION AND CANADIAN-BORN  
IN U.S.A. (1960), 14 YEARS AND OVER, BY EDUCATION AND SEX

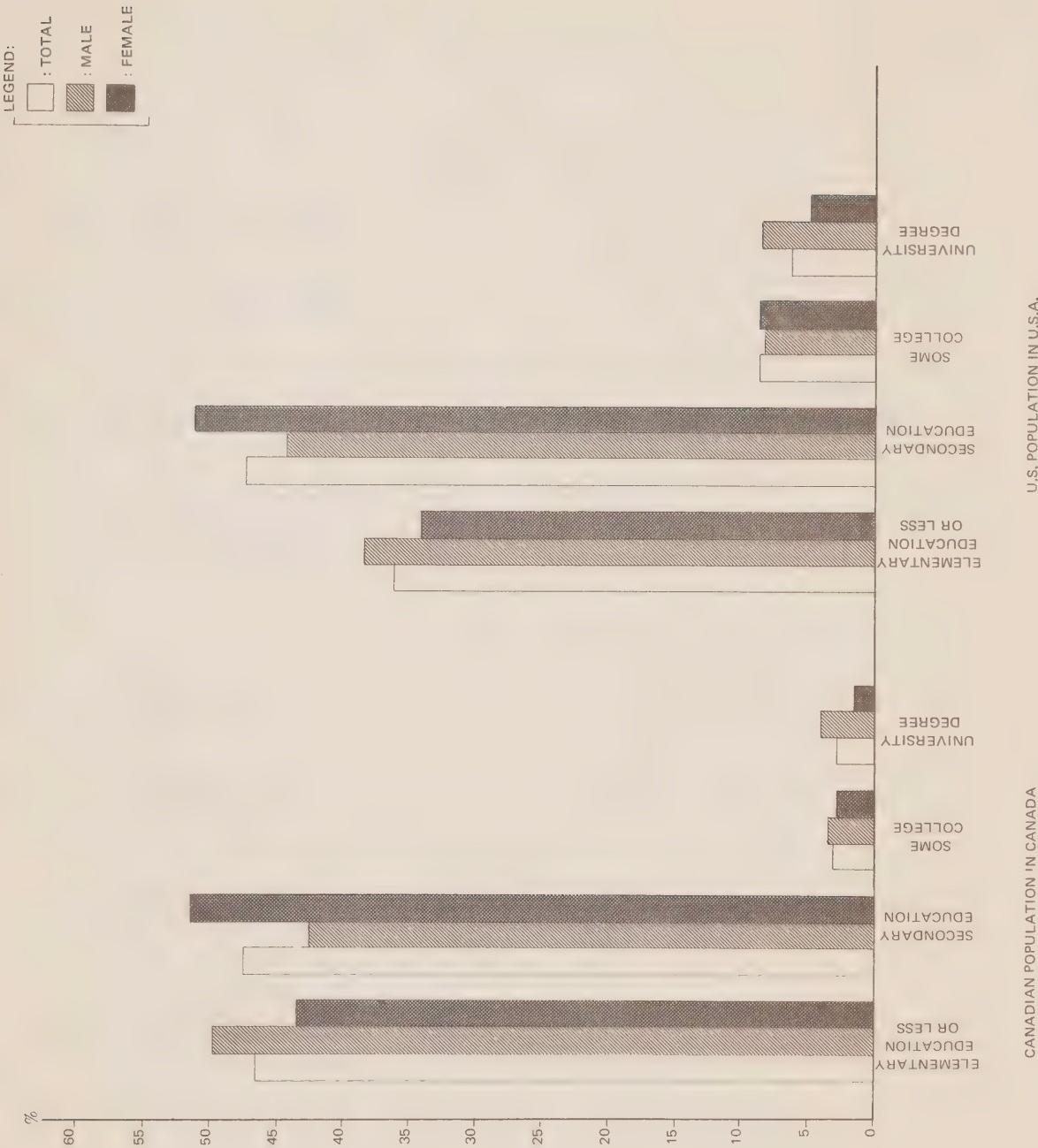
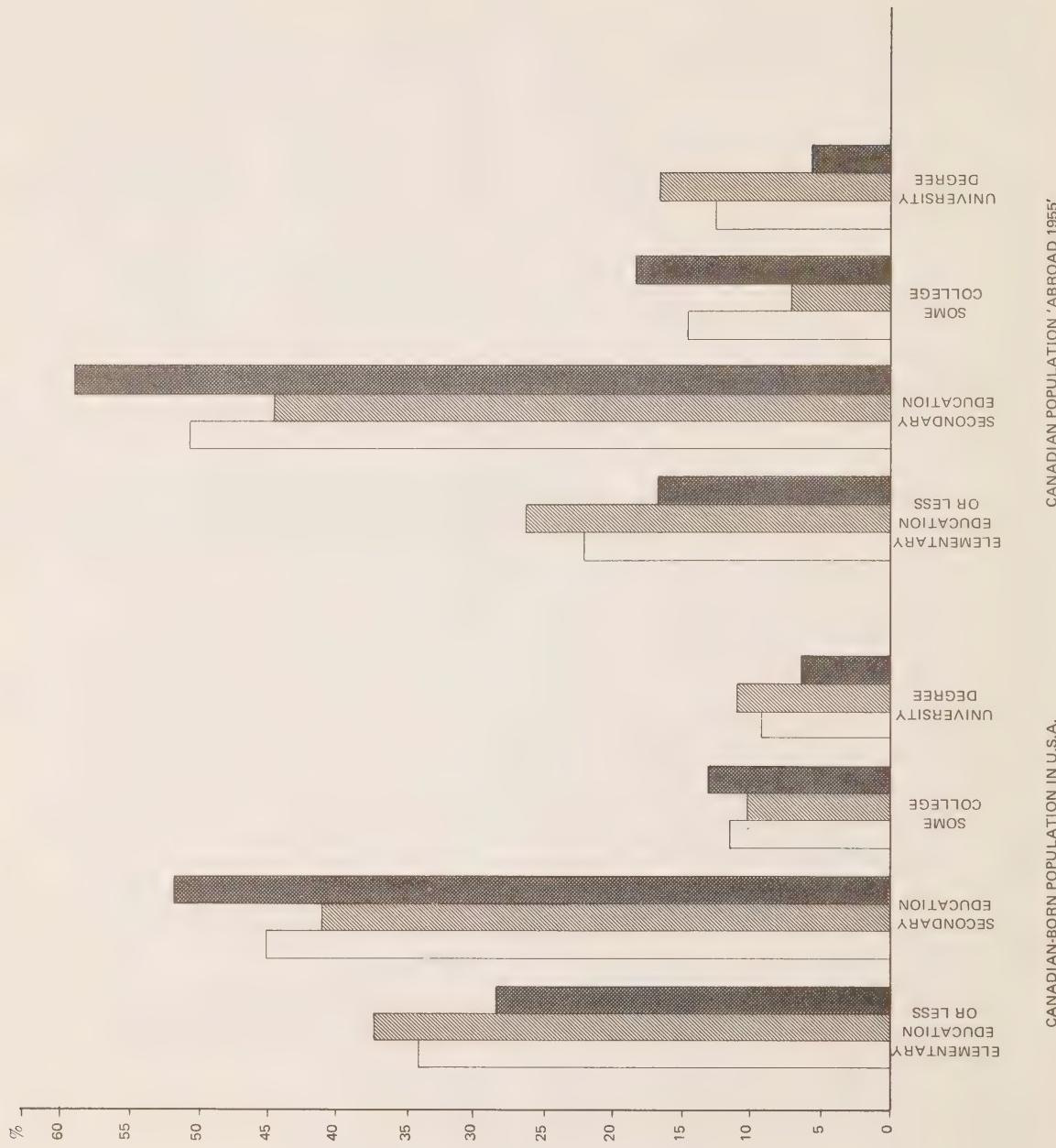


CHART 4: CANADIAN POPULATION (1961), U.S. POPULATION AND CANADIAN-BORN  
IN U.S.A. (1960), 14 YEARS AND OVER, BY EDUCATION AND SEX. (Cont'd)



CANADIAN-BORN POPULATION IN U.S.A.

CANADIAN POPULATION 'ABROAD 1955'

## (d) Occupation

Occupational distribution of Canadian-born emigrants to the U.S.A. could be considered under two broad heads: i) Professionals and ii) Non-professionals. Since non-professionals are given less detailed attention, they are considered first.

### 1. Non-Professionals

Non-professionals formed a higher percentage of the labour force, were older, and had a lower rate of return migration.

During the period 1955-60, 74.3 per cent of the Canadian-born emigrant labour force to the U.S.A. fell in a category other than 'professional, technical and kindred'. They accounted for 77.8 per cent of the 'Canadian-born abroad 1955' in the U.S. labour force in 1960 as seen in Table 6. During 1961, the labour force in non-professional occupations in Canada was 92.4 per cent for males and 84.6 per cent for females.<sup>30</sup> While 41.2 per cent of these non-professionals were above 35 years of age, only 28 per cent of the professionals were in that age group. They had a sex ratio<sup>31</sup> of 141.5, another significant difference from the professionals. The Canadian-born non-professionals counted in the U.S. census of 1960 formed less than 1 per cent of non-professionals in Canada in 1961.

There was some change in the occupational composition of these non-professional emigrants since they entered the U.S.A. It is not clear to what extent these changes were caused by return migration or change in occupation. By 1960 the percentage of clerical and kindred workers declined from 23.5 at the time of emigration to 20.2, of craftsmen from 14.0 to 13.1, and of farmers and farm labourers from 9.0 to 4.8 as found in Table 7 and Chart 5. On the other hand the percentage of managers, officials, etc., increased from 5.4 to 7.0, of sales and service workers together from 13.3 to 16.8, of operatives and kindred workers from 7.8 to 12.8. Assuming the rate of return migration, as well as the mortality rate for these occupational groups have not been significantly different, these changes reflect the mobility within these broad occupational groups.

As is to be expected, the non-professionals had a lower level of education. 13.2 per cent of them had less than eight years of schooling. Males exceeded females three-to-one in this category of less educated, non-professional labour force. Nearly half of those with less than eight years of schooling, and more than half of those with some university education were in the 14-34 age group. A typical non-professional had eight years of schooling or had completed high school. Apart from farmers and labourers, the least educated among the non-professionals were operatives and kindred workers, 23.0 per cent of whom had less than eight years of schooling.

On the other hand, one in every three managers and officials, and one in every five clerical workers or sales workers had at least some university education. Details regarding these characteristics may be found in Table 8 and Chart 6.

When occupational distribution was related to age distribution, more managers, officials and farmers, as is to be expected, were found in older rather than younger age groups. The proportion of males found in clerical occupations in the 14-24 age group, however, was nearly double that found in the 35-44 age group. Probably at a younger age many of them had accepted their first job offer. Among females, clerical workers accounted for half of all non-professionals and social workers; one in every five.

The differential in levels of earnings was found to be significantly higher in several occupations for Canadian-born in U.S.A. in 1959 as compared to those in Canada in 1961. Canadian-born farmers and farm managers in the U.S.A. had double the average annual earnings of their counterparts in Canada. In numerically significant occupations, such as 'managers, officials and proprietors', a 'Canadian-born male in U.S.A. abroad in 1955' earned 10.5 per cent more than one in the same occupation in Canada. Males in sales occupations earned 30 per cent more, craftsmen and foremen 46 per cent more, and operatives and kindred workers 20 per cent more in the U.S.A. Among occupations in which females were numerically significant, the earning differential was 16 per cent for clerical and 31 per cent for service occupations. These differentials were, however, slightly less than they should have been since the Canadian figures refer to 1961 while the American figures are for 1959.

<sup>30</sup> DBS, 1961 *Census*, Series 7.1, pp. 8-12, 10-12.

<sup>31</sup> Number of males per 100 females.

Table 6 — Occupational Distribution of Canadian-Born Experienced Civilian Labour Force Abroad in 1955 and Enumerated in U.S.A. in 1960 by Age Group

Occupation	Total		14-24		25-34		35-44		45-54		55-64		65-74		75 and Over	
	No.	Per Cent	No.	Per Cent												
<b>Professional and Kindred</b>																
Professional Engineers	1,151	2.79	78	0.80	581	3.70	388	4.01	87	1.92	17	1.28	—	—	—	—
Civil engineers	146	0.35	13	0.13	72	0.46	38	0.39	15	0.33	8	0.60	—	—	—	—
Mechanical engineers	341	0.83	21	0.22	190	1.21	114	1.18	16	0.35	—	—	—	—	—	—
Electrical	327	0.79	32	0.33	166	1.06	105	1.09	24	0.53	—	—	—	—	—	—
Other engineers	337	0.82	12	0.12	153	0.97	131	1.35	32	0.71	9	0.68	—	—	—	—
<b>Physical Scientists</b>																
Chemists	122	0.30	11	0.11	72	0.46	39	0.40	—	—	—	—	—	—	—	—
Geologists (geophysicists)	22	0.05	5	0.05	13	0.08	4	0.04	—	—	—	—	—	—	—	—
Physicists	45	0.11	3	0.03	25	0.16	17	0.18	—	—	—	—	—	—	—	—
Others — miscellaneous — mathematicians	24	0.06	—	—	16	0.10	8	0.08	—	—	—	—	—	—	—	—
<b>Biologists and Agricultural Professionals</b>																
Biological scientists	59	0.14	12	0.12	35	0.22	12	0.12	—	—	—	—	—	—	—	—
Agricultural professionals	24	0.06	8	0.08	12	0.07	4	0.04	—	—	—	—	—	—	—	—
<b>Teachers</b>																
Teachers (n.e.s.)	933	2.26	192	1.97	428	2.73	175	1.82	71	1.56	49	3.69	18	6.72	—	—
Professors and college principals	369	0.89	52	0.53	222	1.42	75	0.78	12	0.26	8	0.60	—	—	—	—
School teachers (elementary and secondary)	475	1.15	117	1.20	186	1.18	75	0.78	51	1.12	33	2.49	13	4.85	—	—
Teachers (n.e.s.)	89	0.22	23	0.24	20	0.13	25	0.26	8	0.18	8	0.60	5	1.87	—	—
<b>Health Professionals</b>																
Physicians and surgeons	3,497	8.47	990	10.12	1,847	11.78	415	4.29	178	3.93	50	3.77	17	6.34	—	—
Dentists	808	1.96	4	0.04	628	4.00	135	1.40	25	0.55	16	1.20	—	—	—	—
Nurses, graduate (professionals)	2,297	5.57	786	8.04	1,104	7.04	218	2.25	144	3.18	28	2.11	17	6.34	—	—
Nurses — student, professional	99	0.24	87	0.89	3	0.02	9	0.09	—	—	—	—	—	—	—	—
Medical technicians (medical and dental)	215	0.52	94	0.96	76	0.48	33	0.34	9	0.20	3	0.23	—	—	—	—
Therapists and healers	34	0.08	13	0.13	17	0.11	4	0.04	—	—	—	—	—	—	—	—
Pharmacists	18	0.04	3	0.03	15	0.10	—	—	—	—	—	—	—	—	—	—

Table 6 — Continued

Occupation	Total		14-24		25-34		35-44		45-54		55-64		65-74		75 and Over	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
<i>Law Professionals</i>																
Lawyers and judges	12	0.03	—	—	4	0.03	8	0.08	—	—	—	—	—	—	—	—
<i>Religion Professionals</i>																
Clergymen and priests	290	0.70	11	0.11	116	0.74	100	1.03	38	0.84	21	1.58	4	1.49	—	—
<i>Artists, Writers and Musicians</i>																
Artists and art teachers	356	0.86	80	0.82	192	1.22	60	0.62	20	0.44	—	—	4	1.49	—	—
Authors, editors and reporters	86	0.21	16	0.16	44	0.28	22	0.23	4	0.09	—	—	—	—	—	—
Musicians and music teachers	108	0.26	20	0.21	60	0.38	20	0.21	4	0.09	—	—	4	1.49	—	—
<i>Other Professionals</i>																
Accountants and auditors	2,650	6.42	568	5.81	1,309	8.35	567	5.86	154	3.40	36	2.71	12	4.48	4	20.00
Architects	432	1.05	41	0.42	196	1.25	159	1.65	28	0.62	8	0.60	—	—	—	—
Designers and draftsmen	12	0.03	—	—	8	0.05	4	0.04	—	—	—	—	—	—	—	—
Economists	391	0.95	53	0.54	219	1.40	86	0.89	33	0.73	—	—	—	—	—	—
Psychologists	41	0.10	9	0.09	11	0.07	17	0.18	—	—	—	—	—	—	—	—
Statisticians and actuaries	34	0.08	4	0.04	22	0.14	8	0.08	—	—	—	—	—	—	—	—
Dieticians and nutritionists	22	0.05	10	0.10	8	0.05	4	0.04	—	—	—	—	—	—	—	—
Social welfare and recre. wrks.	46	0.11	19	0.19	19	0.12	8	0.08	—	—	—	—	—	—	—	—
Librarians	137	0.33	42	0.43	67	0.43	24	0.25	4	0.09	—	—	—	—	—	4
Other technicians and kindred	88	0.21	25	0.26	51	0.33	8	0.08	—	—	—	—	—	—	—	20.00
Elec. and electron.	1,374	3.33	344	3.52	667	4.25	242	2.50	85	1.87	24	1.81	12	4.48	—	—
<i>Others</i>	73	0.18	21	0.22	41	0.26	7	0.07	4	0.09	—	—	—	—	—	—
Farmers and farm managers	32,129	77.81	7,830	80.06	11,046	70.43	7,883	81.47	3,986	87.91	1,155	86.97	213	79.48	16	80.00
Mgr's, off's and prop'r's (x-farm)	2,896	7.01	159	1.63	962	6.13	987	10.20	629	13.87	130	9.79	29	10.82	—	—
Clerical and kindred workers	8,346	20.21	2,636	26.95	3,414	21.77	1,543	15.95	588	12.97	134	10.09	31	11.57	—	—
Sales workers	3,021	7.32	672	6.87	888	5.66	895	9.25	451	9.95	106	7.98	9	3.36	—	—
Crafts, foremen and kind. (x-AF)	5,404	13.09	548	5.60	2,045	13.04	1,680	17.36	846	18.66	236	17.77	37	13.81	12	60.00
Operatives and kindred workers	5,287	12.81	1,313	13.43	1,850	11.80	1,442	14.90	544	12.00	130	9.79	8	2.99	—	—
Service workers	3,903	9.45	1,342	13.72	898	5.73	742	7.67	560	12.35	302	22.74	55	20.52	4	20.00

Table 6 — Continued

Occupation	Total		14-24		25-34		35-44		45-54		55-64		65-74		75 and Over		
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	
<i>Others — Cont'd</i>																	
Actors, dancers, entertainers	42	0.10	26	0.27	16	0.10	—	—	—	—	—	—	—	—	—	—	—
Farm labourers and foremen	394	0.95	160	1.64	97	0.62	80	0.83	41	0.90	12	0.90	4	1.49	—	—	—
Labourers (except farm and mine)	1,592	3.86	637	6.51	500	3.19	223	2.30	160	3.53	50	3.77	22	8.21	—	—	—
Occupation not reported	1,018	2.46	321	3.28	302	1.92	230	2.38	113	2.49	38	2.86	14	5.22	—	—	—
Grand Total	41,290	100.00	9,780	100.00	15,684	100.00	9,676	100.00	4,534	100.00	1,328	100.00	268	100.00	20	100.00	20

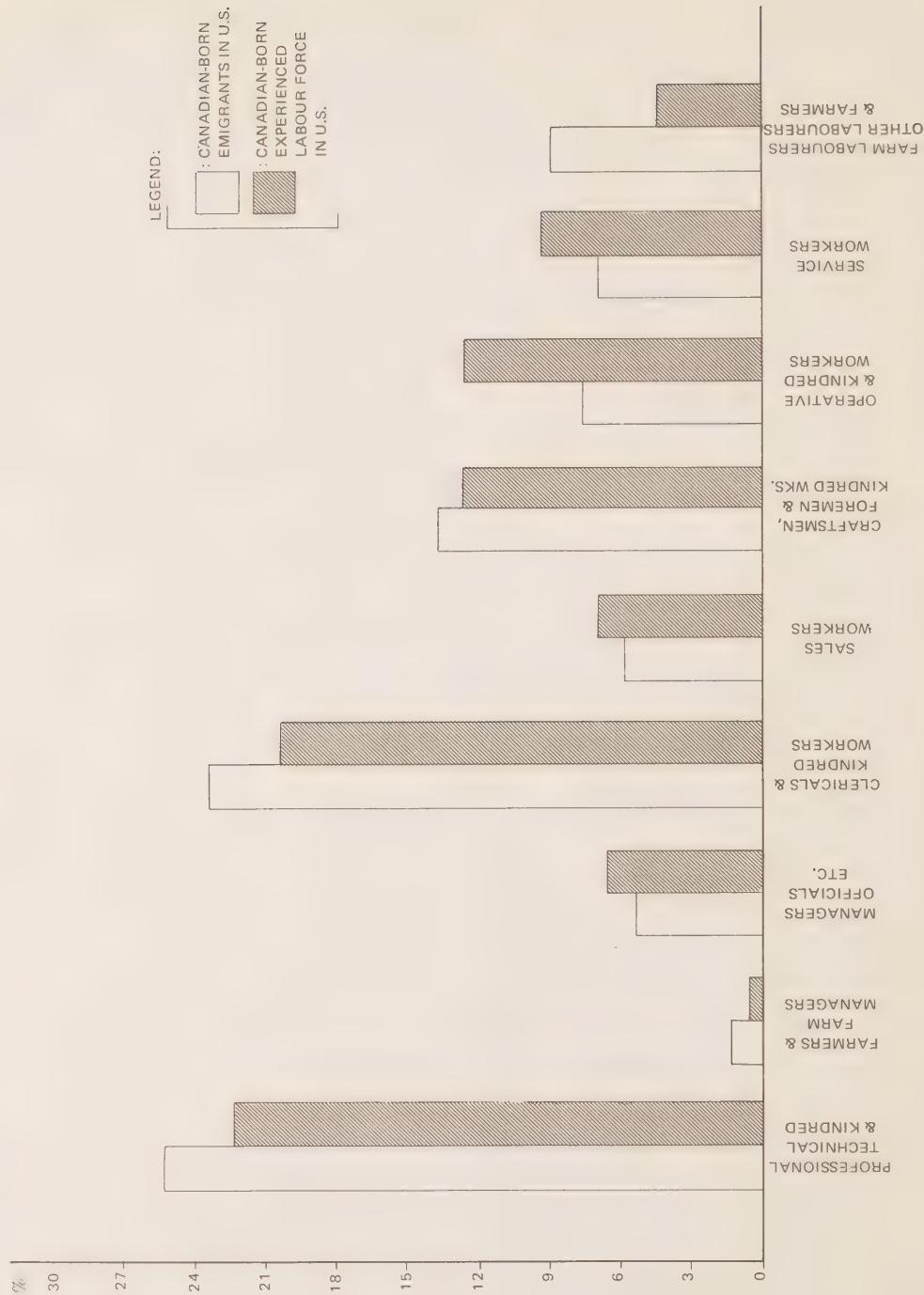
Source: U.S. Department of Commerce, Bureau of the Census, Special Tabulations.

Table 7 — Occupational Distribution of Canadian-Born Emigrants to U.S.A. January 1955 to March 1960

	All Emigrants		Emigrants Counted in U.S.A. in 1960		Emigrants Counted as a Percentage of all Emigrants
	No.	Per Cent	No.	Per Cent	
1. Professional, Technical and Kindred	17,929	25.7	9,161	22.2	51.1
2. Farmers and Farm Managers	884	1.3	226	0.5	25.6
3. Managers, Officials, etc.	3,757	5.4	2,896	7.0	77.1
4. Clerical and Kindred Workers	16,352	23.5	8,346	20.2	51.0
5. Sales Workers	4,038	5.8	3,021	7.3	74.8
6. Craftsmen, Foremen and Kindred Workers	9,779	14.0	5,404	13.1	55.3
7. Operatives and Kindred Workers	5,439	7.8	5,287	12.8	97.2
8. Service Workers	5,259	7.5	3,903	9.5	74.2
9. Farm Labourers, Other Labourers and Farmers	6,239	9.0	1,986	4.8	31.8
10. Others Not Reported	—	—	1,060	2.6	—
11. Total	69,676	100.0	41,290	100.0	—

Sources: U.S. Department of Justice, Annual Reports of Immigration and Naturalization Service 1955-1960.  
U.S. Department of Commerce, Bureau of the Census, Special Tabulations.

CHART 5: OCCUPATIONAL DISTRIBUTION OF CANADIAN-BORN EMIGRANTS TO U.S., JAN. 1955 TO MARCH 1960  
AS COMPARED TO THE OCCUPATIONAL DISTRIBUTION OF CANADIAN-BORN EXPERIENCED CIVILIAN  
LABOUR FORCE ABROAD IN 1955 AND ENUMERATED IN U.S. IN 1960.



## **2. Professionals**

Return migration to Canada is likely to have been significant in causing a gross disappearance rate of 48.9 per cent for professionals as compared to 40.7 per cent for the 'Canadian-born labour force in U.S.A. abroad 1955'. Since a Canadian emigrant who went during this period stayed, on the average, less than 32 months, and since many of the emigrants were in younger age groups, deaths and retirements had not significantly influenced the disappearance rate. Similarly a move from a professional occupation to a non-professional occupation is uncommon. A move in the opposite direction, however, is more likely. In particular some Canadian-born who were in the U.S. as students might have entered one of the professions. The withdrawal of women from the labour force was probably due to marriage and family responsibilities.

Of 'Canadian-born professionals abroad 1955', health professionals formed the biggest group with 38.2 per cent, followed by engineers with 12.6 per cent. Teachers ranked next with 10.2 per cent, followed by artists, writers and musicians (3.9 per cent), religion professionals (3.2 per cent), physical scientists (2.3 per cent), biologists and agricultural professionals (0.6 per cent) and law professionals (0.2 per cent). The rest formed 'other professionals'.

Within the group of health professionals, nurses formed 68.5 per cent. The number of physicians, surgeons and dentists counted was 834; nearly 24 per cent of health professionals. Among 'other professionals', accountants formed 16.1 per cent and designers and draftsmen 14.6 per cent. Mechanical and electrical engineers constituted 58.0 per cent of all professional engineers. Roughly the same proportion of chemists was to be found among physical scientists, and school teachers among all teachers.

Most of these professionals were young with many productive years ahead of them. Over one fifth of them were under 25 and 71.9 per cent under 35. Only 2.5 per cent of them were 55 years of age or over.

It appears that medical professionals and scientists emigrate to the U.S. at a younger age than professional engineers or accountants and auditors. The nursing profession had the youngest of all professionals; 82.6 per cent being under 35, followed by scientists and physicians with 76.6 per cent. Professional engineers had 57.3 per cent under 35 and accountants and auditors 54.9 per cent. This percentage for designers and draftsmen was 69.6. There were no scientists counted who were 45 or over; although teachers in the 45 plus age group formed 14.8 per cent, health professionals 7.0 per cent and engineers 9.0 per cent.

It is possible that some of those who were counted as professionals in younger age groups (14-24, for example), entered the U.S. as students and, having completed their education in the U.S., decided to enter their profession.

### **(e) Sex Ratio**

Males comprised 57.2 per cent of all 'Canadian-born professionals abroad 1955'. If professionals in the 14-24 age group are taken, however, there were two females per male, as noted before. If nurses were removed from the professionals in the 14-24 age group, the sex ratio works out to be 109 males per 100 females.

Some occupations were predominantly 'male occupations', others were 'female occupations'. Men constituted 100 per cent of engineers, legal and religion professionals; 95.6 per cent of physicians, surgeons and dentists; 94.5 per cent of scientists; 93.6 per cent of designers and draftsmen; 83.3 per cent of accountants; 82.7 per cent of college professors and principals; and 68.6 per cent of artists and writers.

On the other hand, women made up 100 per cent of nurses and librarians; 81.8 per cent of social welfare and recreation workers; and 74.1 per cent of school teachers.

### **(f) Education**

As is to be expected a high percentage (68.3) of 'professional and kindred' workers who had emigrated to the U.S. had more than secondary school education. Details on education may be found in Table 9 and Chart 7. Among the numerically significant groups, 77.1 per cent of professional engineers, 87.9 per cent of teachers, 63.4 per cent of health professionals and 60.2 per cent of other professionals had more than high school education.

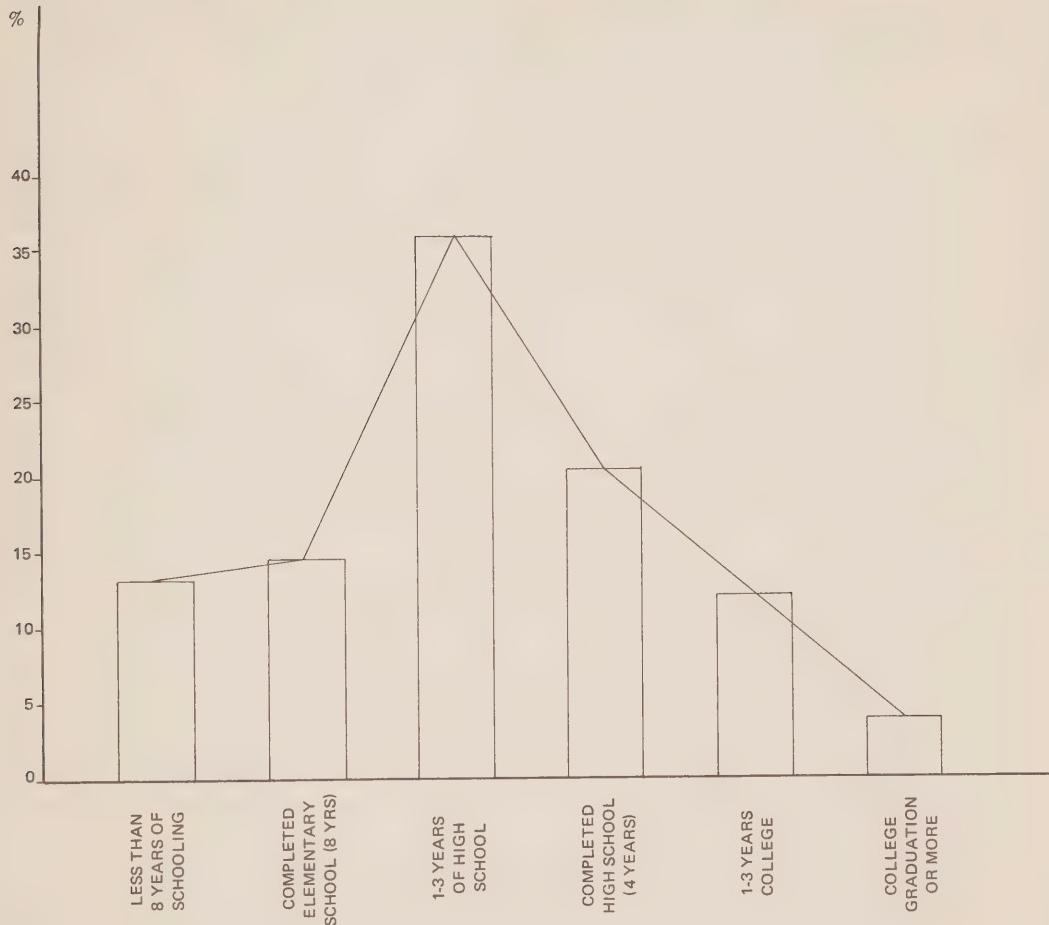
When attention is focussed on the best educated professionals (i.e., those with not less than four years of college) 11.1 per cent were found in the 14-24 age group and 49.0 per cent in the

Table 8 — Non-Professionals Among 'Canadian-Born Experienced Civilian Labour Force Abroad in 1955' and Enumerated in U.S.A. in 1960 by Education

	Completed						College						Graduation or More					
	Less Than 8 Years of Schooling			Elementary School (8 Years)			1-3 Years of High School			Completed High School (4 Years)			Completed High School (4 Years)			Graduation or More		
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	No.	Per Cent	No.	No.	Per Cent	No.	Per Cent	No.	Per Cent
All Non-Professionals	4,256	13.2	4,674	14.5	11,583	36.1	6,570	20.5	3,833	11.9	1,213	3.8	32,129	100.0				
Farmers and Farm Managers	74	32.8	48	21.2	72	31.9	7	3.1	17	7.5	8	3.5	226	100.0				
Managers, Officials and Proprietors	149	5.1	278	9.6	843	29.1	725	25.0	540	18.7	361	12.5	2,896	100.0				
Clerical and Kindred Workers	194	2.3	342	4.1	3,043	36.5	2,909	34.9	1,556	18.6	300	3.6	8,344	100.0				
Sales Workers	166	5.5	378	12.5	1,242	41.1	643	21.3	436	14.4	156	5.2	3,021	100.0				
Craftsmen, Foremen and Kindred Operatives and Kindred Workers	875	16.2	1,147	21.3	2,198	40.7	740	13.7	306	5.7	129	2.4	5,395	100.0				
Service Workers	1,218	23.0	1,268	24.0	1,912	36.2	520	9.8	321	6.1	48	0.9	5,287	100.0				
Farm Labourers and Farmers	666	17.1	682	17.5	1,436	36.8	628	16.1	408	10.4	83	2.1	3,903	100.0				
Labourers (except farm)	175	47.3	76	20.5	76	20.5	31	8.4	12	3.3	—	—	370	100.0				
Occupation Not Reported and Others	533	33.8	323	20.5	460	29.1	121	7.7	113	7.1	29	1.8	1,579	100.0				

Source: U.S. Department of Commerce, Bureau of the Census, Special Tabulations.

CHART 6: NON-PROFESSIONALS AMONG CANADIAN-BORN EXPERIENCED CIVILIAN  
LABOUR FORCE ABROAD IN 1955' AND ENUMERATED IN U.S.A. IN 1960 BY EDUCATION



25-34 age group. Here also scientists and teachers formed the youngest age group, with 72.9 per cent and 70 per cent respectively under 35 as compared to 60.6 per cent of professional engineers. Since younger age groups are usually more mobile, it is quite likely that scientists and teachers have a higher rate of return migration than engineers.

Two other characteristics connected with emigration of the Canadian-born may be briefly mentioned. First, information on the intended destination of Canadian-born emigrants to the U.S. by state reveals that there has been some change in the pattern of geographic distribution in recent years. Secondly, there has been a change in the linguistic composition of Canadian-born emigrants. Both these have an impact on return migration.

### (g) Geographic Distribution

Eleven U.S. states had individually not less than 2 per cent of all Canadian-born in them and together accounted for 83 per cent of Canadian-born in U.S.A. during 1930-50.<sup>32</sup> These states were: Massachusetts, Michigan, New York, California, Maine, Washington, New Hampshire, Connecticut, Illinois, Rhode Island and Ohio. Among them, Massachusetts, Michigan, Maine, New Hampshire, Illinois and Rhode Island showed a decline in the percentage of Canadian-born giving them as intended destination in 1956-68 as compared to the percentage of Canadian-born in them in 1930-50 as seen in Table 10.

During the period 1956-68, these 11 states, with the addition of Florida, attracted 74.5 per cent of Canadian-born emigrants. Within these states, however, there has been a marked change in the number and percentage of Canadian-born. Massachusetts, with the greatest number, had 21 per cent of all Canadian-born in the period 1930-1950. During 1956-68 it dropped to third place with 8.9 per cent of immigrants giving it as their intended destination. California, which ranked fourth in 1930-50, moved up to first place claiming a quarter of all Canadian immigrants to the U.S.A. in 1956-68. Michigan and New York together had 26.9 per cent of all Canadian-born in 1930-50. Only 17 per cent of immigrants gave these states as their intended destination in 1956-68. At the same time Florida, which had only 1 per cent of all Canadian-born in 1930-50, got 5.6 per cent of Canadian-born emigrants in 1956-68, despite the lower average per capita income of the state. It is hardly a coincidence that California and Florida with the lowest variance in average normal temperature (Table 10) together increased their percentage of Canadian-born from 10.4 in 1930-50 to 29.8 in 1956-68. In view of the recent trend of Canadian-born immigrants to settle in California and Florida it might be contested that this demonstrates a tendency to retire to 'sun and sand' rather than indicating a significant change in the distribution of those in the labour force. Since we do not have information on the age distribution of Canadian-born emigrants by states, it is not easy to refute the above argument by direct evidence.

There is, nevertheless, indirect evidence that the increased immigration to California and Florida in recent years has not been due to Canadian-born retiring to these states. Let us assume that all the Canadian-born emigrants 60 years of age and over who went to the U.S.A. during 1956-68 were retiring. Even under the extreme assumption that *all* of them went to California and Florida, the rest going to these two states comprised 28.1 per cent of all Canadian-born emigrants to the U.S.A. during 1956-68. The warmest places in winter are Florida, California and Washington in that order; and the coolest places in summer are California, Washington and Maine in that order. These places together had 20.3 per cent of the Canadian-born in 1930-50 but 37.7 per cent of Canadian-born emigrants went to these states in 1956-68. All this indicates that weather is becoming a factor influencing the geographic distribution of Canadian-born in the U.S.A. and is also likely to have been a pull factor.

### (h) Linguistic Composition

In the past the U.S.A. received a fairly large number of French-Canadian immigrants. They formed 33.6 per cent of all Canadian-born in the U.S.A. in 1900. By 1950, however, their percentage had declined to 24.0.<sup>33</sup>

Over two thirds of French-Canadians in the U.S.A. in 1950 were over 45 years of age. Non-French, in the same age group represented only 56.5 per cent. The higher average age of French-Canadians indicates the declining trend in their number among emigrants to the U.S.<sup>34</sup> The

<sup>32</sup> DBS, *The Canadian-Born in the United States*, p. 7.

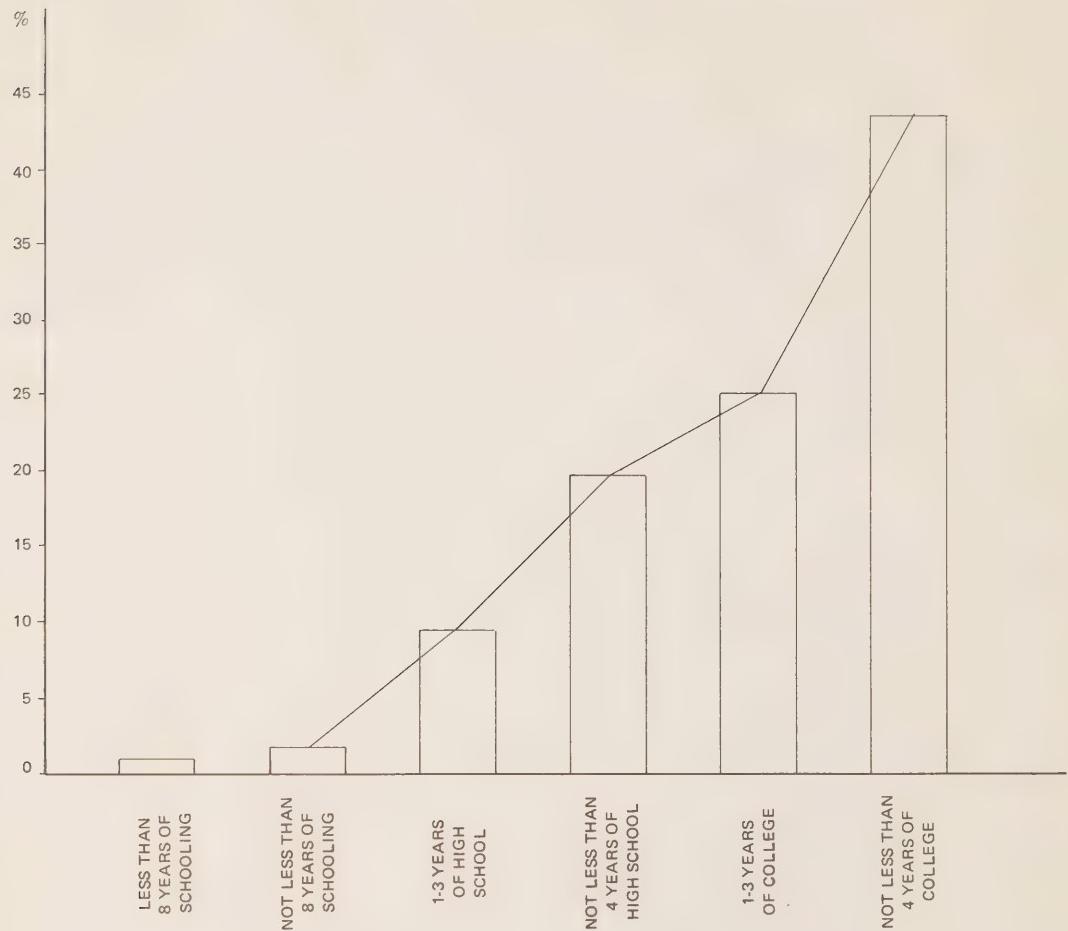
<sup>33</sup> *ibid.*, p. 4.

**Table 9 — Professional and Kindred Workers Among 'Canadian-Born Experienced Civilian Labour Force, Abroad in 1955' and Enumerated in U.S.A. in 1960**  
by Education

	With Less Than 8 Years of Schooling		With Not Less Than 8 Years of Schooling		With 1-3 Years of High School		With Not Less Than 4 Years of High School		With 1-3 Years of College		With Not Less Than 4 Years of College		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Professional and kindred	76	0.8	142	1.6	867	9.5	1,815	19.8	2,283	24.9	3,978	43.4	9,161	100.0
Professional engineers	—	—	21	2.1	64	6.3	147	14.5	40	4.0	738	73.1	1,010	100.0
Scientists	—	—	—	—	15	5.5	10	3.7	14	5.1	233	85.7	272	100.0
Teachers	17	1.8	8	0.9	32	3.4	56	6.0	216	23.2	604	64.7	933	100.0
Health professionals	—	—	8	0.2	234	6.7	1,040	29.7	1,138	32.6	1,077	30.8	3,497	100.0
Law professionals	—	—	—	—	—	—	—	—	4	33.3	8	66.7	12	100.0
Religion professionals	4	1.4	4	1.4	9	3.1	16	5.5	54	18.6	203	70.0	290	100.0
Artists, writers and musicians	4	1.1	17	4.8	73	20.5	67	18.8	93	26.1	102	28.7	356	100.0
Other professionals	51	1.9	84	3.2	440	16.6	479	18.1	583	22.0	1,013	38.2	2,650	100.0

Source: U.S. Department of Commerce, Bureau of the Census, Special Tabulations.

CHART 7: PROFESSIONAL AND KINDRED WORKERS AMONG 'CANADIAN-BORN EXPERIENCED CIVILIAN  
LABOUR FORCE, ABROAD IN 1955' AND ENUMERATED IN U.S.A. IN 1960, BY EDUCATION



French-Canadians who migrated to the U.S. were in blue-collar and service occupations, had lower incomes and lived in the northern states.<sup>35</sup> Internal migration within the U.S., primarily from South to North, has reduced employment opportunities for French Canadians, particularly in the North-eastern states. This might have reduced the rate of emigration of French-Canadians to the U.S. The implications of such a change in the linguistic composition of Canadian-born emigrants to the U.S.A. may be examined after a brief discussion of the 'push and pull' factors in migration.

**Table 10 — Distribution of Canadian-Born Population, Per Capita Income and Variance in Average Normal Temperature in Selected American States**

	Per Capita Income <sup>1</sup>	Percentage of Canadian-Born White Population 1930-50	Percentage of Canadian-Born Emigrants by Intended Destination 1956-68 <sup>2</sup>	Variance in Average Normal Temperature <sup>3</sup>
1. Massachusetts	+	21.1	8.9	44
2. Michigan	+	15.1	7.1	48
3. New York	+	11.8	10.0	50
4. California	+	9.4	24.2	13
5. Maine	+	5.7	3.6	42
6. Washington	+	4.2	4.3	36
7. New Hampshire	-	3.8	1.7	53
8. Illinois	+	3.2	2.8	50
9. Connecticut	+	3.0	3.4	42
10. Rhode Island	+	2.8	0.5	38
11. Ohio	-	2.1	2.4	44
12. Florida	-	1.0	5.6	29
Total	0	83.2	74.5	

<sup>1</sup> Plus signs indicate that the state had a higher average "personal income per capita" in 1949-51 as compared to the average for U.S.A. (Simon Kuznets, Ann Ratner Miller and Richard A. Easterlin, *Population Redistribution and Economic Growth in United States, 1870-1950*, Volume II, The American Philosophical Society, Philadelphia, p. 185) and a higher "per capita income" in 1968.

<sup>2</sup> U.S. Immigration Reports, 1956-68.

<sup>3</sup> In order to arrive at the "variance in average normal temperature", the differences in average maximum and minimum for January and July normal temperatures were calculated. Mostly the temperatures used were those from airports and in cases where several were given, the average was taken.

## VI PUSH AND PULL FACTORS

The question has often been asked: "Why do people move?" Traditionally, the reasons for moving have been examined within the framework of the push and pull theory. The theory has, however, received much criticism in recent years.<sup>36</sup> An alternative approach has been suggested by

<sup>34</sup> *ibid.*, p. 14.

<sup>35</sup> Bogue, Donald J., *loc. cit.*, p. 372.

<sup>36</sup> Petersen, William, observes: "This (push and pull) conceptualization is inadequate, first of all, because it implies that man is everywhere sedentary, remaining fixed until he is induced to move by some force. . ." (William Petersen, *Population*, The Macmillan Company, New York, p. 607.) Anthony Richmond says, "The traditional sociological view has been that populations are generally static and that it requires a positive 'push or pull' to overcome inertia and promote migration. This is no longer a realistic assumption under the conditions prevailing in modern urban societies. Migration, like other forms of occupational and social mobility, is functionally necessary in advanced industrial society. . ." (Anthony Richmond, *Post-War Immigration in Canada*, University of Toronto Press, 1968, p. 269.)

Everett S. Lee.<sup>37</sup> The push and pull conception has the advantage of simplicity. Also it is not too difficult to fit the alternative approach suggested by Lee into the push and pull framework.<sup>38</sup>

Often it is not easy to distinguish what precisely are the factors determining the push or the pull. It is more difficult to measure the relative strength of push or pull in causing a person to move from one geographic location to another. These push and/or pull forces will have varying degrees of strength depending upon the time, the person, his environment and his evaluation of prospective changes.

The push and pull forces believed to be instrumental in causing migration between Canada and the U.S.A., could be considered broadly under (a) economic and (b) non-economic factors; though both act at the psychological level of motivation. Only a perfunctory survey of these factors is attempted here, however.

### (a) Economic Factors

Under this heading the following are considered briefly:

- 1) Economic Opportunities
- 2) Level of Earnings
- 3) Employment Conditions

#### 1. Economic Opportunities

Even a cursory examination of the causes of migration shows that differentials in economic opportunity in various countries have been a major determinant in the rate and direction of migration. Henry Pratt Fairchild observed half a century ago that "the natural causes of immigration at the present time lie primarily in the superiority of the economic conditions in the United States. . . . The European peasant comes to America because he can — or believes he can — secure a greater return in material welfare for the amount of labour expended in this country than in his home land."<sup>39</sup>

The term economic opportunity, however, does not lend itself to a precise definition. Broadly speaking, it is considered to be associated with the degree of optimism of the prospective emigrant, regarding the economic prospects in the two countries in question. The national economic mood, often governed by current and comparative levels of economic growth, is one of the factors influencing the individual's perception of his prospects.

The importance of the degree of optimism regarding the economic prospects of the country of origin becomes evident when one considers the emigration waves from Britain. *The Economist* observes in this connection that "the long waves of emigration from this country appear to be motivated more by the national economic mood than by individual hard circumstances."<sup>40</sup>

When looked at from this viewpoint and long-term Canada, with its comparatively small population and vast natural resources for the development of which capital and technical know-how are readily available, is unlikely to offer a push force. It has been pointed out that "the possibilities of sustaining an expanded population, without any serious reduction of the standard of living are immensely greater in Canada than in the United States. . . ."<sup>41</sup>

A rough and ready measure of the relative levels of economic opportunity available in Canada and the U.S. can be found in the concept of per capita national product, gross and net, and personal disposable income. In 1965 Canada's per capita gross national product was only 76.0 per cent of U.S. gross national product; net national product was 69.0 per cent, and personal disposable income 74.0 per cent. Canada's gross national product per employed person was only four

<sup>38</sup> Lee, Everett S., distinguishes mainly four sets of factors as determining migration. They are: (1) factors at origin, (2) factors at destination, (3) intervening obstacles and (4) personal factors. The factors at origin and destination are classified into plus(+) factors, minus (-) factors and neutral (0) factors. Assuming these factors can be quantified, if the aggregate at the point of origin is negative, then for that person and at that time, there is a 'push' force in operation. Similarly, if the aggregate is positive in the country of intended destination, as evaluated by that person at that time, there is a 'pull' force in operation. However, the readiness of the person to respond to the push or pull will depend upon the relative strength of push and pull factors, the intervening obstacles and his motivation which is largely based on personal factors.

<sup>39</sup> Fairchild, Henry Pratt, *Immigration*, New York, 1919, p. 8.

<sup>40</sup> *The Economist*, August 31, 1967, p. 42.

<sup>41</sup> Sandwell, Bernard Keble, "The Canadian People" in George Peel Gilmour, *Canada's Tomorrow*, p. 23.

fifths that of the U.S.<sup>42</sup> Such disparities have often meant greater economic opportunity in the U.S. and therefore acted as a pull force to that country.

## 2. Level of Earnings

The forces of push and pull may be considered from the viewpoint of earnings and wages. Information on the median earnings of Canadian-born in the U.S. may be compared to the same information for Canadian labour force for various age groups. As was seen in Table 5 and Chart 3, the ratio of median earnings of 'Canadian-born males in the U.S. abroad 1955' to males in the Canadian labour force was found to be 1.14 for the 25-34 age group, 1.24 for the 35-44 age group, 1.11 for the 45-54 age group and 0.91 for the 55-64 age group. When all Canadian-born males in the U.S. were substituted for the 'Canadian-born abroad 1955', the ratios were found to be 1.32, 1.58, 1.56 and 1.53 respectively for the same age groups. Assuming the second set of ratios provide us with a long-term picture of anticipated earnings when moved to the U.S., an average increase of 50 per cent in earnings is to be expected.

These differences in earnings between Canada and the U.S. have been more conspicuous in professional occupations. During the period 1953-60, the U.S.-Canada differential in starting salaries for engineers increased threefold.<sup>43</sup> Also "it is generally conceded that in all professions, average earnings in industry are higher in the United States than in Canada."<sup>44</sup> Tibor Scitovisky found that "in the 40 years between 1911 and 1951, the income of professional people is estimated to have risen only one-quarter as fast as the income of industrial workers" in Canada.<sup>45</sup>

**Table 11 — Real Wages in Manufacturing in Canada and U.S.A., 1955-1967**

Year	Real Wages in Manufacturing (per hour) in U.S.A. Dollars		
	Canada	U.S.A.	Difference
1955	1.66	2.12	0.46
1956	1.72	2.20	0.48
1957	1.76	2.26	0.50
1958	1.76	2.24	0.48
1959	1.82	2.30	0.48
1960	1.86	2.34	0.48
1961	1.88	2.37	0.49
1962	1.91	2.42	0.51
1963	1.95	2.46	0.51
1964	1.98	2.50	0.52
1965	2.03	2.53	0.50
1966	2.08	2.57	0.49
1967	2.14	2.60	0.46

Source: Computed from: International Labour Office: *Bulletin of Labour Statistics*, 1965, 4th Quarter, Geneva, pp. 39, 40, 60, 65 and *Bulletin of Labour Statistics*, 1968, 3rd Quarter, pp. 45, 46, 67, 75.

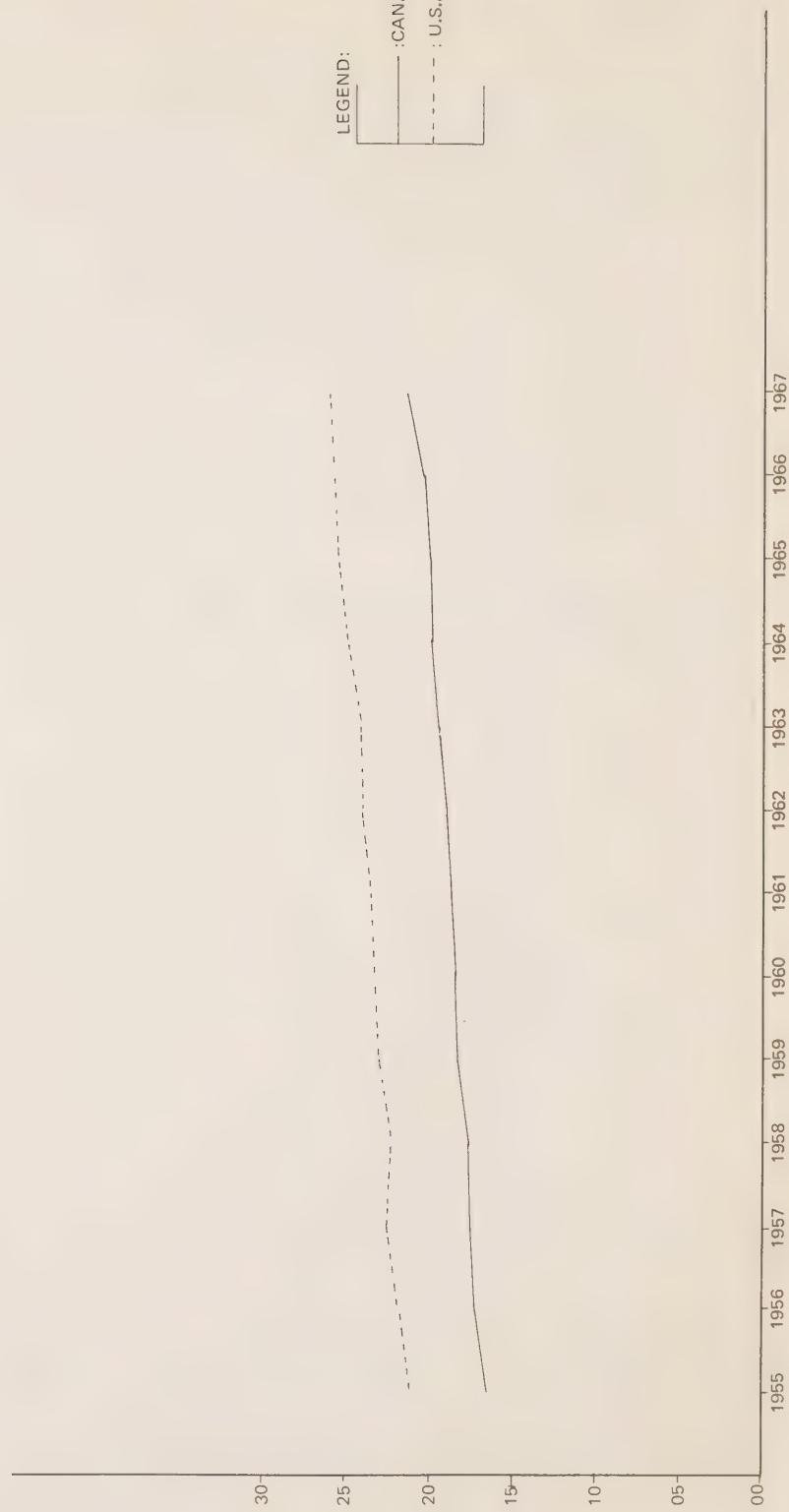
<sup>42</sup> Economic Council of Canada, *Third Annual Review: Prices, Productivity and Employment*, November 1966, p. 71.

<sup>43</sup> Department of Labour, Economics and Research Branch, *The Migration of Professional Workers Into and Out of Canada, 1946-1960*, Bulletin No. 11, 1961, p. 25.

<sup>44</sup> *ibid.*

<sup>45</sup> Scitovisky, Tibor, "An International Comparison of the Trend of Professional Earnings", *The American Economic Review*, March 1966, p. 25.

CHART 8: REAL WAGES IN MANUFACTURING IN CANADA  
AND U.S.A., 1955-1967



Real wages in Canada and the U.S.A. could also be compared in order to get a better indication of the operation of push and pull factors in Canadian-American population movements. Real wages<sup>46</sup> in manufacturing in Canada and the U.S. are used for such a comparison on the assumption that other wages were, broadly speaking, in line with the wages in manufacturing.

As seen in Table 11 and Chart 8, during the period 1955-60, the level of real wages in manufacturing was higher in the U.S.A. by \$0.48 an hour; 27 per cent above the Canadian level. By 1961-67 this difference had moved up slightly to \$0.50 an hour. On a weekly basis, assuming a 35-hour week, the difference works out to be \$16.80 and \$17.50 respectively for these periods. The fact that there has been no bridging of the gap in wage differentials indicates that the push and pull factors worked in the direction of encouraging continued emigration from Canada to the U.S. It is assumed that the differences, if any, in the levels of taxation between these countries did not affect this relationship.

### 3. Employment Conditions

It is only natural to expect employment conditions to form an important push or pull factor. If employment conditions are very bright in the U.S. and very bleak in Canada, normally, the push from Canada and the pull towards the U.S. will cause migration to the latter and vice versa. Since the Canadian and American economies are so closely interdependent, however, such a possibility is remote. As seen from Chart 9, unemployment rates in Canada and the U.S. usually move in the same direction, though not to the same degree.

When unemployment rates in Canada are related to the emigrant labour force, a time lag of about one year is found before emigration responds to employment conditions. This relationship, by and large, held good till 1965 when the changes in immigration regulations to the U.S. made the North American labour market more imperfect than before. Thus the view that population movements are closely related to employment conditions is well supported.

#### (b) Non-Economic Factors

The non-economic factors, mostly social and political, play no less important a role than the economic factors in causing migration.

Family relationships, events in the family life cycle, social status and prestige, degree of social peace and harmony are the primary social factors that induce an individual to migrate.

Family relationships such as the desire to be close to relatives, motivate people to move. Thus, if the Canadian-born population in the U.S. is large, it is likely that, other things being equal, the potential for further emigration of the Canadian-born to the U.S. is also large. It gives an incentive for the prospective emigrant from Canada to join his 'people' in the U.S.

Events in the family life cycle, such as marriage, would promote the desire to migrate. As was observed before, the decision of many unmarried Canadian-born women in younger age groups to migrate to the U.S.A. might have been influenced by the desire to find a suitable marriage partner in the U.S. Success in this venture would likely result in permanent residence in that country.

Social status and prestige of occupation may vary from country to country and even if income remains the same, some occupations in some countries may appear to be more attractive than others. For example, Grubel and Scott point out that "Even though there is a world market for the best and the United States pays the highest salaries, other countries have non-pecuniary methods of compensating and holding their best, such as giving them prestige, power and admiration through asking for counsel in public affairs . . ."<sup>47</sup> Social stratification being not too dissimilar in Canada and the U.S.A., however, this is unlikely to have influenced Canada-U.S.A. population movements.

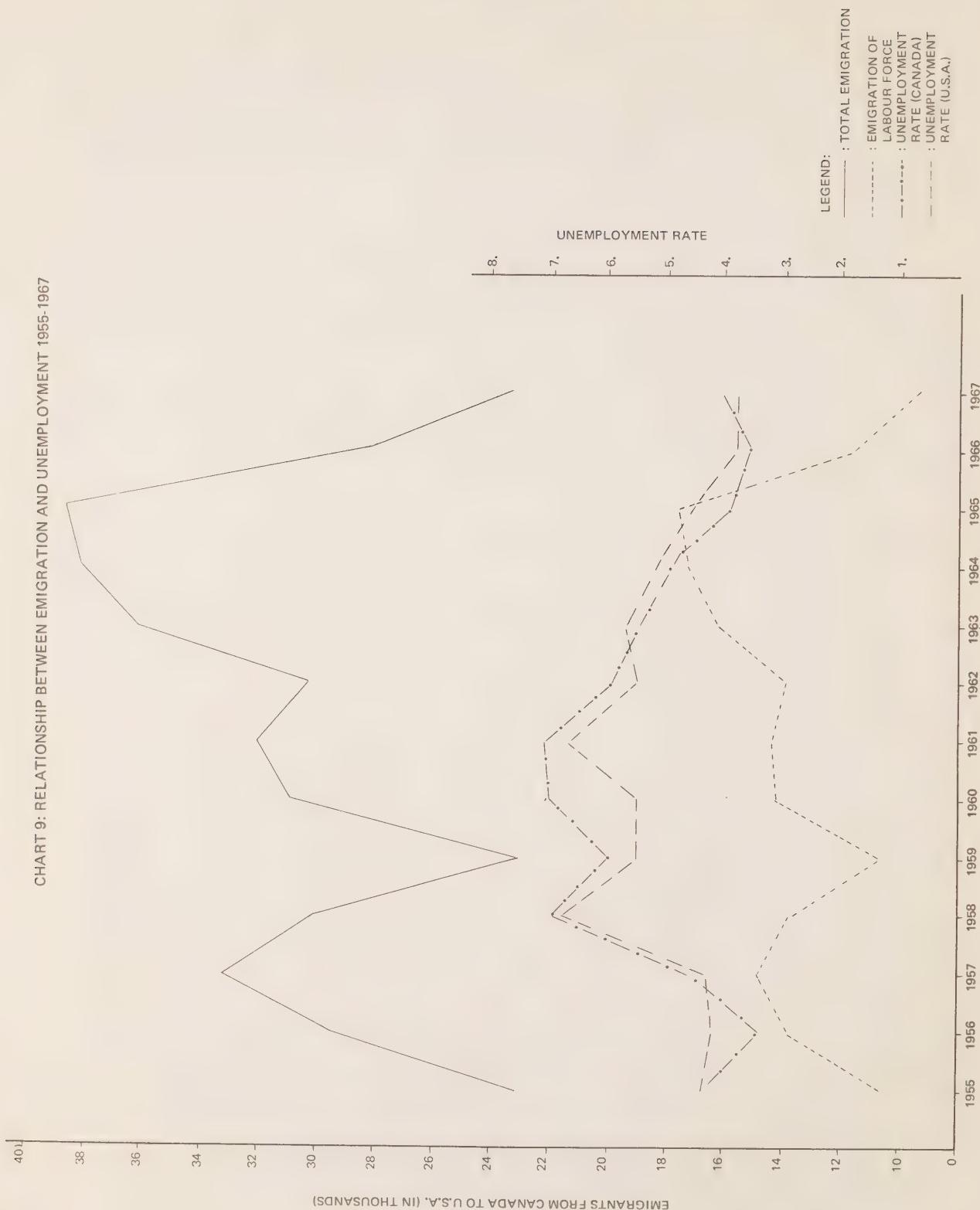
Social peace and harmony is one of the principal non-economic factors that has an impact on the rate and direction of migration. Comparatively speaking, U.S. society in recent years has expressed a greater degree of social disharmony than Canada. The National Commission on Violence in the U.S. testifies to the fact that such an increase in social disharmony has occurred in the U.S. The report says: "the volume of violent crimes (in U.S.A.) compares unfavourably both absolutely and on a per capita basis with other industrial nations."<sup>48</sup> Also the Commission concludes that "the

<sup>46</sup> Calculated from International Labour Office, *Bulletin of Labour Statistics*, 1968, 3rd quarter, pp. 45-75.

<sup>47</sup> Grubel, H. G. and Scott, A. D., "The Characteristics of Foreigners in the U.S. Economic Profession", *American Economic Review*, LVII:1, March 1967, p. 141.

<sup>48</sup> *The Globe and Mail*, Toronto, January 31, 1962, p. 2.

CHART 9: RELATIONSHIP BETWEEN EMIGRATION AND UNEMPLOYMENT 1955-1967



basis of the social order is threatened"<sup>49</sup> in the U.S. The racial situation in the U.S. and the general increase in violence highlighted by the assassination of several prominent political personalities in a comparatively short span of time have contributed to a reduction in the strength of the pull factor to the U.S.A.

Politically, moral convictions regarding the U.S. involvement in the Vietnam war and the military implications it may have for the individual reduces the pull of the U.S. Comments a Canadian doctor: "The only thing that is keeping them (Canadian doctors) here now is the Vietnam war and the race riots in the U.S. What young man is going down there if he is eligible for the draft, or what older man is going down if his children are?"<sup>50</sup> Also it pushes, as is well known, several Americans to the north.

Desire for adventure and travel, inherent in many human beings and positively correlated with youth and education, influence many in their decision to migrate. For example, 21 per cent of British scientists who emigrated to North America gave 'desire for adventure and travel' as one of the reasons for migrating.<sup>51</sup> So did 18.6 per cent of immigrants to Canada from Britain and 20.9 per cent from Germany during the period 1946-61.<sup>52</sup>

Also the tendency to migrate may become infectious. The publicity given the success story of a Canadian-born in the U.S. might influence many in Canada to follow suit. The tendency 'to follow the crowd' is still very much a human characteristic.

As was pointed out before, weather is likely to have acted as a pull force in Canadian emigration to the U.S. in recent years. Migration to pleasant climates has a consumption element in it. And there is always a 'trade off' between good climate and more money. To what extent one is prepared to sacrifice one for the other depends on the individual. With the recent increase in recreation-based, rather than resource-based, employment opportunities, however, the sacrifice of money is becoming less important. Also it is likely that people who have achieved their goals of saving and investment may decide to retire to 'sun and sand'. This type of movement from Canada to the United States is likely to be more or less a one-way traffic.

There is evidence that more money was not alone sufficient reason for a professional to emigrate. It was however, a necessary incentive. Perhaps what has been observed in this connection with internal migration of academicians in the U.S. is likely to be true of many other professionals in their move between Canada and the U.S. A study on the internal migration of academicians says: "Salary is important as a minimum, not a key factor."<sup>53</sup> J. K. Galbraith points out that "one insults the business executive or the scientist by suggesting that his principal motivation is the pay he receives."<sup>54</sup>

What emigrating scientists and professionals from Europe say about their decision to migrate to the U.S. may also hold good for Canadians emigrating to the U.S.A. Only 24 per cent of British scientists in the Hatch/Rudd survey mentioned better economic opportunity as a reason for migration to North America. On the other hand, 26 per cent mentioned 'better experience' and research facilities.<sup>55</sup> The Canadian committee that examined the problem of 'brain drain' to the U.S. says that ". . . establishment of new and well-endowed centres of excellence both in universities and in industry . . . able to offer a highly intellectual atmosphere . . ."<sup>56</sup> in the U.S. has been one of the main causes of the emigration of scientists and technologists. A Nobel prize-winning German physicist once commented: "Our best people will continue to emigrate (to the U.S.A.) and not permanently to these inadequate and unnecessarily complicated working conditions."<sup>57</sup> Though conditions in Canada might have been less 'inadequate' and less 'complicated' as compared to those

<sup>49</sup> *ibid.*, p. 1.

<sup>50</sup> MacKenzie, Dean Walter, University of Alberta, Faculty of Medicine in the *Medical Post* as quoted in the *Financial Post*, January 18, 1969, p. 6.

<sup>51</sup> This has been computed from the Hatch/Rudd survey in Britain among 3,400 graduates who entered post-graduate courses in 1957-58 and who later emigrated. The percentage given by Hatch and Rudd exceeded 100 since the same respondent gave more than one reason for emigration. (Committee on Manpower Resources for Science and Technology, *The Brain Drain*, Her Majesty's Stationery Office, 1967, p. 708.)

<sup>52</sup> Richmond, Anthony H. *loc. cit.*, p. 32.

<sup>53</sup> Ladinsky, Jack, "The Geographic Mobility of Professional and Technical Manpower", *The Journal of Human Resources*, II:4, p. 474.

<sup>54</sup> Galbraith, J. K., *The Affluent Society*, p. 175.

<sup>55</sup> Committee on Manpower Resources for Science and Technology, *loc. cit.*, p. 70.

<sup>56</sup> *ibid.*, p. 19.

<sup>57</sup> Mossbauer, Rudolf, as quoted in *U.S. News and World Report*, May 22, 1967, p. 80.

in Germany they are not likely to have been so in comparison with the U.S. A prominent Canadian social psychologist who emigrated to the U.S. says that his move was not motivated by money but by being able to do "what he is interested in".<sup>58</sup>

According to a recent study much the same view has been expressed by Canadian Medical Scientists in the U.S.<sup>59</sup> It says: "The multitude of interrelated factors which attract basic medical scientists to the United States can be summed up in the word 'opportunity'." Opportunity for rapid career advancement, opportunity to take on added responsibility, to test one's ideas with enlightened and stimulating colleagues, to reach for a goal, and in some cases simply to work."<sup>60</sup>

## VII CAUSES OF RETURN MIGRATION

The focus of attention may now be shifted to the causes of return migration. The rate of return migration of Canadian emigrants to the U.S. depends primarily upon the following factors. First, economic and non-economic push and pull factors discussed above could cause return migration of Canadians. Second, the total number and date of arrival of Canadian immigrants in the U.S. is important, since if the migration stream has been significant the counterstream also will be significant. The rate and extent of return migration, however, is also a function of time. Third, composition of the immigrant population, their age, occupation, as well as their cultural diversity or uniformity will affect return migration.

To what extent the above factors have been responsible for the return migration of the Canadian-born from the U.S. may now be examined. It has been observed that if the migration is caused more by push than by pull factors, the chances of return migration are slim.<sup>61</sup> For example, few of the Irish who fled the famine returned to Ireland. It might also be true that if migration is caused more by pull factors than by push factors, chances of return migration are high. Since migration to the U.S. from Canada is likely to have been caused more by pull factors than by push factors, a higher rate of return migration should, therefore, be expected.

It is always possible that the Canadians who crossed the border to the South found to their dismay that the pasture was a lot less greener than they had anticipated. This could have contributed substantially to a high rate of return migration of Canadian professionals from the U.S. In particular, attention may be drawn to the fact that though they improved their earnings in relation to those in Canada, this was not true in comparison with the U.S. white population.

There are also non-economic factors that pulled these emigrants back to Canada. Family feelings might have caused some return migration. For example, one out of four British scientists who returned to Britain from North America gave 'domestic or family reasons'<sup>62</sup> for their decision to return. 'Homesickness' was mentioned more often than any other as the reason for the return of British immigrants in Canada.<sup>63</sup> Social and political conditions in the U.S. could have acted as a push force on many Canadians. The increase in the rate of violence in U.S. society coupled with the moral convictions, and military implications regarding the Vietnam war would have hastened the pace of return migration. The latter was more important for Canadians in the age bracket liable for draft, or with children in that age bracket.

Psychologically one has an emotional attachment to things familiar in childhood. Thus some of those who migrated to the U.S. might feel this emotional attachment to Canada too strong to resist and therefore might decide to return 'home' later. What R. B. Davidson said of Caribbean immigrants in Britain is likely to be true, perhaps to a lesser degree, of Canadian immigrants in the U.S. "The glow of memory warms the heart towards the homeland, time and distance blunting the recollection of the pressures that led to migration."<sup>64</sup> Once emigration is accomplished and some time is spent in the new country the desire for travel and adventure is blunted. It may be presumed, therefore, that the higher the percentage who emigrate for this reason, the higher also will be the rate of return migration.

<sup>58</sup> MacDonald, Dr. Ross, a psychologist with Georgetown University, as reported in *Toronto Daily Star*, May 29, 1967, p. 65.

<sup>59</sup> Hesse, C. de and Fish, D. G., "Canadian-Trained Medical Scientists View Canadian Academia from their American Laboratories", *The Canadian Medical Association Journal*, November 5, 1966.

<sup>60</sup> *ibid.*, p. 2.

<sup>61</sup> Lee, Everett S., *loc. cit.*, p. 55.

<sup>62</sup> Hatch, Stephen and Cudd, Dr. Ernest, in Committee on Manpower Resources for Science and Technology, *loc. cit.*, p. 72.

<sup>63</sup> Richmond, Anthony, *loc. cit.*, p. 244.

<sup>64</sup> Davidson, R. B., *Black British*, p. 119.

The rate of return migration from the U.S. during 1955-59 was not likely to have been high because the volume of migration was high. The average annual rate of emigration of Canadian-born to the U.S. in 1955-59 was less than that for the previous five-year period of 1950-54 or for the next period of 1960-64.

The occupational composition of the emigrant population, however, was perhaps a major factor that contributed to the high rate of return migration. A higher content of professionals among the emigrants is found to lead to a higher rate of return migration. A recent American study on internal migration observes that "... professional workers are almost twice as migratory as any other occupational group."<sup>65</sup>

Professionals constituted a quarter of all Canadian-born emigrants to the U.S.A. during 1950-59: 23.9 per cent for 1950-54, 24.8 per cent for 1955-59. The figure of 23.7 per cent for 1960-61<sup>66</sup>, however, rose to 33.7 per cent for 1965-68. This increasing percentage of professionals among Canadian-born emigrants is likely to continue especially in the light of recent changes in U.S. immigration regulations, as is to be seen later.

The age distribution of Canadian-born emigrants to the U.S. during 1955-59 does not appear to have caused a higher rate of return migration than in the previous years. This observation is based on the assumption that since younger age groups are more mobile, the younger the composition of the emigrant population, the greater are the chances of return migration.<sup>67</sup> Among the emigrants of 1955-59, 61.9 per cent were in the 10-39 age group as compared to 64.6 per cent of the emigrants in that age group in 1951-54. The percentages in this age group were 62.7 and 58.6 respectively for 1960-64 and 1965-68.

Cultural uniformity or diversity and the presence or absence of legal barriers in crossing national boundaries have been found to influence the rate of return migration significantly. A greater degree of cultural uniformity and absence of any legal barriers are conducive to a higher rate of return migration. For example, it has been estimated that during the period 1946-61 only 20 per cent of Italian and German immigrants who came to Canada returned while 34 per cent of the British and 40 per cent of the U.S. immigrants did so.<sup>68</sup> A higher rate of return for Canadian immigrants arriving from the U.S.A. and Britain has been observed in another study.<sup>69</sup>

Though this may appear, *prima facie*, unlikely, it is not difficult to reason why it happens. If an immigrant has to surmount numerous obstacles — language, distance, problems of a social and cultural nature, rules regulating immigration, need for changing the occupation for which he is trained — he will have to be very strongly motivated to make the initial move from his home country. Disappointments in his 'promised land,' unless serious, would not urge him 'to take the next plane' back to his country of origin.<sup>70</sup>

Prospective emigrants among the Canadian-born to the U.S.A. did not encounter any cultural or legal barriers till 1965. Since then some legal barriers have been erected. Culturally there has been a change in the composition of Canadian-born emigrants to the U.S. Because of the lower percentage of French-Canadians among emigrants, the cultural diversity of emigrants has become less marked. On the other hand, Canadian-born prospective emigrants need a higher level of motivation in order to surmount the legal restrictions on entry into the U.S. This might lower the rate of return migration in the future. There is also an indication, as pointed out, that weather is becoming a more important factor in migration. And those who respond more to this factor might not return as readily as the others.

To sum up, return migration from the U.S.A. will be encouraged by the changing occupational composition of the emigrants, their greater degree of cultural uniformity and by the social and political conditions in the U.S.A., and discouraged by the imposition of restrictive immigration rules as well as by the increasing response to weather as a pull force to the U.S.

<sup>65</sup> Ladinsky, Jack, *loc. cit.*, p. 479.

<sup>66</sup> Parai, Louis, *loc. cit.*, p. 204.

<sup>67</sup> The age group considered here is 10-39. The 0-9 age group is not included since we are focussing attention on the short period and the 0-9 age group does not make the decision to move on their own. It could have been better to use the age group 15-39. This was not possible since the age distribution of emigrants were available only by decennial age groups.

<sup>68</sup> Department of Citizenship and Immigration, *Remigration and Occupation*, Report MR-4/5, p. 1.

<sup>69</sup> Richmond, Anthony H., *loc. cit.*, p. 253.

<sup>70</sup> The above reasoning may be better understood in the context of "Occupational Status Dislocation" caused by migration. (Reference Richmond, Anthony H., *loc. cit.*, p. 118.)

## VIII EMIGRATION IN 1960-68 AND PROJECTED RETURN MIGRATION

### (a) Emigration

Emigration of Canadian-born to the U.S. was, on an annual average, over 34,000 during 1960-65. During 1966-68, however, this declined to an annual average of over 26,000. This decline in the emigration of Canadian-born to the U.S. should be seen in the light of the United States Immigration Law of 1965 which abolished the national origins system of selection of immigrants and, for the first time in history, imposed controls on the immigration of Canadians to the U.S.A.

It is believed that the U.S. immigration regulations and procedures that came into effect in July 1968 would further reduce the flow of Canadian emigrants to the U.S. so that "Canadians born in Canada will find moving to the U.S. even more difficult than in the last two years."<sup>71</sup> The new immigration regulations have imposed a ceiling of 120,000 from the Western hemisphere, comprising North and South America. The principal contributors in this hemisphere were: Mexico, Cuba, Canada, Dominican Republic, Jamaica, and Columbia.

No limit is enforced regarding the number of immigrants from any single country within the Western hemisphere. However, the 120,000 Cuban refugees now in the U.S. will have their status adjusted from 'parolee' to permanent resident during the next three years, thereby reducing the number of immigrants that could be admitted from other countries in the Western hemisphere to 80,000 a year until 1971. This could create a backlog of prospective Canadian-born emigrants to the U.S.

The system of priorities will enable the emigration of some professionals, such as engineers, architects, chemists, physicists, nurses, mathematicians, dieticians, pharmacists and physical therapists without waiting while the others will be subjected to long delays.<sup>72</sup> These restrictions will have the effect of lowering the volume of emigration of Canadian-born to the U.S. and raising the percentage of professionals among them.

### (b) American Citizenship and Canadian-Born Emigrants

The preparedness of the Canadian-born immigrant in the U.S. to supplement his American residence with American citizenship may be considered as a positive and unmistakable intention of not returning to Canada. Since immigrants come under the category of 'aliens' who are supposed to report to the U.S. Government in January of each year, it is quite likely that those who had made up their mind to stay permanently in the U.S. would have taken American citizenship as soon as they became eligible. Such a decision would not be an irrevocable one since, if at a later date the person concerned wanted to return to Canada, he could do so.

Historically, Canadians in the U.S.A. have shown a greater degree of reluctance to give up their citizenship in order to acquire the American one. It has been observed that "They (Canadian-born in U.S.A.), naturalize though not to the same extent as the British, Germans and Scandinavians."<sup>73</sup> In 1950, 71.3 per cent of Canadian-born in the U.S. were citizens and 186,500 were still Canadian citizens.<sup>74</sup> (See Chart 10.)

In order to get a clear picture of the relationship between the number of Canadian-born immigrants and the number becoming naturalized in the U.S., however, one has to compare these figures after allowing for a time lag of five years since a five-year period of residence is compulsory before naturalization. During the years 1955-59, the number of Canadian-born who became naturalized in the U.S.A. corresponded to 50 per cent of the number that entered in the period 1950-54. These percentages, after allowing for a time lag of five years, were 32 for the Canadian-born who went in 1955-59, and 21 for those who emigrated in 1960-68.<sup>75</sup> This indicates that there has been an increasing degree of reluctance on the part of Canadian-born emigrants in the U.S. to give up their Canadian citizenship. Expressed in absolute numbers, Canadian-born taking American citizenship decreased from an annual average of 12,000 during 1951-55 to 7,100 in the period 1964-68 despite an increasing trend in emigration during most of this time. This suggests that many of the Canadian-born who migrated to the United States were not planning permanent residence there.

<sup>71</sup> Kaplan, Frank, "Harder Than Ever to Move to the U.S.", *The Financial Post*, June 29, 1968, p. 11.

<sup>72</sup> *ibid.*

<sup>73</sup> Coats, R. H. and Maclean, M. C., *The American-Born in Canada*, The Ryerson Press, Toronto, 1943, p. 28.

<sup>74</sup> DBS, *loc. cit.*, p. 18.

<sup>75</sup> U.S. Department of Justice, Annual Report of the Immigration and Naturalization Service, 1950-67.

**Table 12 — Estimated Percentage of Canadian-Born Emigrants Not Getting Naturalized in U.S.A., 1953-1968**

Year	Emigrants	Number Getting Naturalized	Number Not Getting Naturalized as Per Cent of Emigrants, Five Years Ago
1948	22,612	—	—
1949	21,515	—	—
1950	18,043	—	—
1951	20,809	—	—
1952	28,141	—	—
1953	28,967	10,909	51.8
1954	27,055	13,233	38.5
1955	23,091	17,285	4.2
1956	29,533	10,810	48.1
1957	33,203	9,930	64.7
1958	30,055	9,279	68.0
1959	23,082	9,403	65.2
1960	30,990	9,408	59.3
1961	32,038	9,075	69.3
1962	30,377	8,293	75.0
1963	36,003	8,649	71.2
1964	—	8,041	65.2
1965	—	7,017	77.4
1966	—	6,915	78.4
1967	—	6,627	78.2
1968	—	6,915	80.8

Source: U.S. Department of Justice, *Annual Reports of the Immigration and Naturalization Service*, 1953-1968.

### (c) Projected Return Migration

In the light of the above information and the information on return migration already discussed, it might be possible to have a very rough estimate of return migration of Canadian-born emigrants who went south during the period 1960-68. It has been found that 68 per cent of the Canadian-born who went to the U.S. in 1955-59 did not take American citizenship in the years 1960-64. They, if alive, continued to live in the U.S.A. as immigrants or moved out of the U.S.A. Also we have seen that 34.6 per cent of those who came to the U.S. as immigrants during 1955-60, returned to Canada. These two pieces of information put together suggest that more than half of those Canadian-born emigrants who refuse to take American citizenship return to Canada.

In the light of the above information, an attempt is made to estimate the rate of return migration of Canadian-born who migrated to the U.S. during the period 1960-68. The estimate is based on the following assumptions:

- (a) The percentage of Canadian-born not taking U.S. citizenship even after five years of residence in the U.S. will remain at 79.0, the level of 1960-63 emigrants.
- (b) The relationship between the number of Canadian-born not taking American citizenship and the number returning to Canada will remain at the level observed for the period 1955-59.

CHART 10: ESTIMATED PERCENTAGE OF CANADIAN-BORN EMIGRANTS TO THE U.S.A.  
NOT TAKING AMERICAN CITIZENSHIP, 1953-1968.



During this period it was found that 34.6 per cent of the emigrants returned as compared to 68 per cent who did not take American citizenship. Since the percentage of Canadian-born not taking American citizenship during the period 1963-68 is assumed to have remained at the 1960-63 level of 79 per cent, the proportion of emigrants who returned to Canada works out to be 40.3 per cent during 1960-68.

This estimate of return migration for the period 1960-68 is likely to be on the low side for the following reasons:

1) During the period 1956-68, the number of Canadian-born becoming naturalized in the U.S.A. as a percentage of emigrants who came five years before declined from 51.9 in 1956 to 19.2 in 1968. Assumption (a) above, however, has not considered this rising trend observed in the unpreparedness of Canadian-born to take American citizenship.

2) As already observed the rate of return migration for a group of British immigrants in Canada during the period 1961-65 has been nearly three times as high as return migration in 1956-60. If a similar pattern is assumed to be true for return migration from the U.S.A. to Canada, a substantially higher rate should be expected in 1960-68.

3) Professionals have been found to have a higher rate of return migration as noted already. Since they constituted a higher percentage of immigrants in the labour force in 1965-68 than in 1955-59 (33.4 compared to 25.8) this would likely lead to a higher rate of return migration.

Since the gross emigration of Canadian-born to the U.S. during the 1960-65 period has been over 205,800, of whom 40.3 per cent might have returned to Canada, we arrive at an annual *net* rate of migration of 20,000 Canadian-born to the U.S. during this period.

Under the same set of assumptions the number of Canadian-born who will stay permanently in the U.S. from among the immigrants in the period 1966-68 is likely to be about 16,000 a year. It may be noted, however, that including both temporary and permanent migrants, during the same period Canada was receiving on an average 17,000 immigrants a year from the U.S. In 1968 Canada received over 20,000 immigrants from the U.S.A. These figures suggest that the net migration of Canadian-born to the U.S. is currently not very significant and depending upon economic, social and political conditions in the two countries, Canada might even show a net gain in this process of population exchange in the near future.

## IX BRAIN DRAIN

Finally, the 'brain drain' issue may be considered briefly since this is usually the context that provokes a discussion on the population movements between Canada and the U.S. Brains have always shown a tendency to go where they feel they are appreciated. Canadians are no exception.

In modern terminology, however, discussions often center around the words "brain drain" or "brain gain". These terms imply that the large scale emigration/immigration of certain groups of people in the labour force will have an unfavourable/favourable effect on the economic and social development of the country. This assumption is neither universally valid for all countries nor uniformly applicable to the same country at different points of time. Its validity rests on the economic and social development attained by the country concerned, the degree and level of utilization of the 'brains', the destination of these migrants, the type of contact they maintain with the former country and their accomplishments in their country of adoption.

Countries worried about the 'brain drain', often ignore the 'brain gain' that sometimes more than compensates, as in the case of Canada, for the loss. Commenting on the emigration from Canada to the U.S. of scientists and engineers equivalent to 29.8 per cent of first-degree earners in science and engineering during 1957-61, Grubel and Scott observed: "These statistics are misleading in the case of Canada since they take account neither of the reflux from the United States nor of the inflow from other countries into Canada, both of which are known to be substantial."<sup>76</sup> Louis Parai<sup>77</sup> and K. V. Pankhurst<sup>78</sup> also have pointed this out.

Even the assumption that a net loss of brains through migration is inimical to the welfare of the losing country is being questioned.<sup>79</sup> An immigrant's remittances to his former country, the

<sup>76</sup> Grubel, H. G. and Scott, A. D., "The Immigration of Scientists and Engineers to the United States, 1949-61", *Journal of Political Economy*, LXXIV:4, August 1966, p. 373.

<sup>77</sup> Parai, Louis, *loc. cit.*, p. 34.

<sup>78</sup> Pankhurst, K. V., "Migration Between Canada and the United States", *The Annals of the American Academy of Political and Social Science*, Vol. 367 (September 1966), p. 57.

<sup>79</sup> Grubel, Herbert and Scott, Anthony D., "The International Flow of Human Capital", *Proceedings of the American Economic Association*, 1966, p. 273.

possibility of influence being yielded by him in the country of adoption to the advantage of his former country, the chance that the emigrant's departure might highlight the handicaps he faced in the home country, and the overall increase in productivity such moves may cause, are some of the advantages attributed to the country supplying these professional emigrants. This point of view has not gone unchallenged, however.<sup>80</sup>

The above discussion is based mostly on the assumption of permanent migration. As was found in our study, however, part of the migration is only temporary, in the sense that a certain number return 'home' after a period. On the debit side of such temporary migration is the loss to the Canadian economy from the failure of these emigrants to contribute to the gross national product of Canada — both directly and indirectly. On the other hand, it is quite likely that the temporary migrant will return better equipped intellectually, socially and economically and that the education, training, experience, social outlook and attitude he obtains in the U.S. will enable him to better contribute to the future growth of the Canadian economy. "If such population movements are discouraged," warned Tom Kent, former deputy minister of Manpower and Immigration, "the interplay of knowledge and experience and resources between the two countries would inevitably be reduced in a great many ways."<sup>81</sup> Migration should not be conceptualized only as a response to economic opportunity. It can also be instrumental in creating economic opportunities.

It is an indisputable fact that human capital, like physical capital, is becoming increasingly mobile. In the absence of any physical controls, the circulation of human capital might, in the future, become quite significant. Such movement will be aided by the increasing trend towards professionalism in many occupations. Just as international trade enhances the efficient utilization of resources, international circulation of human capital is likely to do so in the realm of human resources. As suggested by Harry Johnson, "In the production and utilization of human talents, as in the production and utilization of commodities, self-sufficiency is likely to be far less efficient than international specialization and exchange."<sup>82</sup>

A certain amount of emigration of Canadian-born professionals to the U.S.A., therefore, even if it is not affected by the recent introduction of controls, need not be viewed with undue alarm. Perhaps such movement may be more aptly described as 'brain trade' or 'brain exchange' rather than as 'brain drain' or 'brain gain'. In this process of 'brain trade', the U.S.A. had a surplus in 1961-65 to the extent of about 2,000 a year. This dwindled to less than 500 in 1966. In 1967 Canada had, perhaps for the first time in the history of migration between this country and the U.S., a surplus of over 500, and in 1968 over 1,000.<sup>83</sup> It appears that a net gain for Canada in this process of exchange of professionals may be considered a mixed blessing. The recent discussion on the implications of the increasing proportion of American teachers in Canadian universities is a case in point.<sup>84</sup>

## X SUMMARY OF FINDINGS

To sum up the main findings of the study, it has been found that the emigration of Canadian-born to the U.S. has lost much of its significance as a drain on Canada's human resources. Fewer people are emigrating to the U.S., and of those who do, more are returning to Canada. The return migration has been around 35 per cent of Canadian-born emigrants during the period 1955-60 and 40 per cent in the period 1960-68. The net migration of Canadian-born to the U.S. was about 19,000 a year in 1955-59, and according to estimates the rate rose slightly to 20,000 in the period 1960-65 and fell to 16,000 in 1966-68.

An increasing proportion of professionals among the emigrants, greater cultural uniformity of recent emigrants, failure of many of them to raise their earnings to U.S. levels, and the social and political conditions in the U.S.A. may have induced higher rates of return migration. An increasing rate of return migration is also suggested by the declining proportion of Canadian-born opting for

<sup>80</sup> Brinley, Thomas, *The International Circulation of Human Capital*, pp. 490-493.

<sup>81</sup> Speech delivered by Tom Kent in Alberta on the Second Centenary week of University of Alberta, *The Globe and Mail*, March 8, 1967, p. 29.

<sup>82</sup> Johnson, Harry, "The Economics of the Brain Drain: The Canadian Case", *Minerva*, Vol. III, No. 3, Spring 1965.

<sup>83</sup> Department of Justice, *Annual Reports of the Immigration and Naturalization Service*, 1964-68; Department of Manpower and Immigration, *Immigration Statistics*, 1964-68 and Parai, Louis, *loc. cit.*, p. 204.

<sup>84</sup> It has been alleged that American professors are 'taking over' Canadian universities and in particular social sciences and humanities faculties thereby threatening the development of Canadian culture. (Welbourn, Patricia, "Made in U.S.A.", *The Ottawa Journal Weekend Magazine*, March 22, 1969, pp. 2-6.)

U.S. citizenship. On the other hand, the imposition of legal barriers to entry into the U.S. and the increasing importance of climatic considerations might reduce the rate of return migration.

The principal characteristics of Canadian-born emigrants to the U.S. during the period 1955-59 were the following: the number of females exceeded the number of males; and they were better educated than the Canadian and U.S. population in general. Their earnings in the U.S., however, did not reflect the level of education they had attained. They did improve their earnings when compared with the earnings of the same age groups in Canada, but not as compared to the earnings of corresponding age groups among U.S. whites. Non-professionals, who formed the majority, were older and had a lower rate of return migration than professionals. Nearly half of the professionals who emigrated in the period 1955-59 had returned to Canada by 1960.

The push and pull factors causing migration are found to be applicable to both emigration and return migration. It is suggested that the non-economic factors are more important for professionals than for non-professionals.

The 'brain drain' could be better understood if considered as a process of exchange of brains, or 'brain trade' mutually beneficial to both Canada and the U.S.A. rather than a 'drain' or 'gain'. Even if looked at from the viewpoint of 'drain' or 'gain', Canada is currently having a net 'gain' of brains from the U.S.A.



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This manuscript was edited and prepared for publication by the Information Service  
on behalf of the Program Development Service.







